A CROSS-SECTIONAL STUDY ON PREVALENCE OF REPRODUCTIVE TRACT INFECTIONS BASED ON SYNDROMIC APPROACH AMONG MARRIED WOMEN AGED 18 TO 45 YEARS IN A RURAL AREA OF KANCHEEPURAM DISTRICT, TAMIL NADU, 2011

Dissertation submitted to

THE TAMILNADU DR. MGR MEDICAL UNIVERSITY

In partial fulfillment of the requirements for the degree of

M.D. BRANCH XV

COMMUNITY MEDICINE

THE TAMIL NADU Dr. MGR MEDICAL UNIVERSITY,

CHENNAI, TAMILNADU.

APRIL - 2012

CERTIFICATE

This is to certify that the dissertation titled **'A CROSS-SECTIONAL STUDY ON PREVALENCE OF REPRODUCTIVE TRACT INFECTIONS BASED ON SYNDROMIC APPROACH AMONG MARRIED WOMEN AGED 18 TO 45 YEARS IN A RURAL AREA OF KANCHEEPURAM DISTRICT, TAMILNADU, 2011'** is a bonafide work carried out by **Dr. M. GEETHA**, Post Graduate student in the Institute of Community Medicine, Madras Medical College, under my supervision and guidance towards partial fulfillment of the requirements for the degree of M.D.Branch XV Community Medicine and is being submitted to The Tamilnadu Dr.M.G.R. Medical University, Chennai.

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ACKNOWLEDGEMENT

I gratefully acknowledge and sincerely thank **Prof. Dr. V. Kanagasabai**, **M.D.,** Dean, Madras Medical College for granting me permission to conduct this study.

I whole heartedly thank **Prof. Dr. A. K. Rajendran**, **M.D., D.P.H**., Director, Institute of Community Medicine, Madras Medical College for guiding me in this study and for his constant encouragement and support.

I feel greatly indebted to **Dr. V. V. Anantharaman, B.Sc., M.D., D.P.H., D.D.,** Assistant Professor, Institute of Community Medicine, Madras Medical College for his valuable suggestions and guidance.

I am grateful to **Dr. A. Chitra, M.D**., Assistant Professor, Institute of Community Medicine, Madras Medical College for her valuable time and supporting guidance.

I wish to express my sincere thanks to **Dr. S. Soundammal, D.P.H.**, Tutor, Institute of Community Medicine, Madras Medical College for her valuable opinions.

I wish to thank my colleagues and staff at Institute of Community Medicine for their cooperation and help.

I wish to thank my parents for their moral support throughout this period.

I am indebted to all the women who participated in the study, without whose cooperation this study would not have been possible.

Above all, I thank God whose grace and blessings has helped me complete this study successfully.

ABBREVIATIONS

AIDS	-	Acquired Immuno Deficiency Syndrome
BV	-	Bacterial vaginosis
df	-	degree of freedom
DLHS	-	District Level Household Survey
HIV	-	Human Immunodeficiency Virus
HPV	-	Human Papilloma Virus
HSV	-	Herpes Simplex Virus
ICMR	-	Indian Council of Medical Research
ICPD	-	International Conference on Population and Development
IIPS	-	Indian Institute of Population Sciences
IUD	-	Intra Uterine Device
LBW	-	Low Birth Weight
LGV	-	Lymphogranuloma venereum
MCH	-	Maternal and Child Health
NACO	-	National AIDS Control Organisation
NFHS	-	National Family Health Survey
NRHM	-	National Rural Health Mission
NS	-	Not significant
OCP	-	Oral Contraceptive Pills
RCH	-	Reproductive and Child Health
RTI	-	Reproductive Tract Infections
SS	-	Statistically significant
STD	-	Sexually Transmitted Diseases
STI	-	Sexually Transmitted Infections
UNFPA	-	United Nations Fund for Population Action
WHO	-	World Health Organisation

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INTRODUCTION

1. INTRODUCTION

Reproductive health of women is of great importance due to its implications for their own health, health of their children, family members and socioeconomic development of society. Reproductive health has several components such as fertility control, safe motherhood and prevention and control of reproductive tract infections including sexually transmitted diseases.[1]

The International Conference on Population and Development (ICPD) (Cairo, Egypt) in 1994 re-defined the concept of reproductive health and emphasized that prevention and treatment of Reproductive tract infections including Sexually Transmitted Infections are integral to the promotion of Reproductive health.[2]

Women in reproductive age group are at risk of complications from menstruation, pregnancy and childbirth. This problem is more pronounced in developing parts of the world where women often have to deal with unwanted pregnancy, unsafe abortions, problems arising out of contraception, risk of contracting reproductive tract infections (RTIs) and sexually transmitted infections (STIs) including HIV infection, different sociocultural norms and economic dependence which further reduce their capacity to protect themselves from RTI/STIs.

RTI's cause considerable discomfort and reduced economic productivity among both males and females. But the most severe and long term sequelae arise in women: pelvic inflammatory disease, cervical cancer, infertility, spontaneous abortion and ectopic pregnancy. Untreated RTIs also result in fetal wastage and congenital infections. The impact of RTI on the transmission of HIV infection and the morbidity and mortality of HIV adds substantially to the total health impact of RTI. The presence of an STI increases the risk of acquiring and transmitting HIV infection by three to five times.

According to 2005 WHO estimates, 448 million new cases of curable STIs (syphilis, gonorrhoea, Chlamydia and trichomoniasis) occur annually throughout the world in adults aged 15-49 years. According to WHO-UNAIDS report 2010, there were 33.3 million HIV cases in the world at the end of 2009. This included 2.6 million new infections in 2009. South and South East Asia was the second largest contributor to this high burden with 3.8 million cases of HIV, after Sub Saharan Africa.[3]

In poor and developing countries, over one-third of healthy life-years lost among women of reproductive age are due to reproductive health problems including sexually transmitted diseases and HIV/AIDS, while these conditions account for only 12% in the developed world.[4]

According to NFHS-2 (1998-99) estimates nearly 4 out of 10 currently married women in India reported at least one reproductive health problem that could be symptomatic of a more serious RTI.[5] DLHS 3 (2007-08) data reported a prevalence of 18.2% of RTI/STI symptoms among ever married women. The prevalence was higher in the rural area (19.6%) compared to urban area (15.0%). [6]

India had an estimated 2.27 million HIV positive persons in 2008, with an estimated adult HIV prevalence of 0.29%. This is nearly 7% of the global burden of 33 million HIV cases. The sexual mode continues to be the major mode of transmission.[1] NFHS 2 data showed that the prevalence of RTIs/STIs in Tamilnadu was 27.8% (urban 53%; rural 50%). Among these one half (51%) have not sought any treatment. [5]

Though the prevalence of RTIs show a decreasing trend, they continue to be a significant health problem among women in terms of morbidity and mortality. The women of reproductive age group constitute about one fifth (22.2%) (310.6 thousand)[7] of the population of India. Therefore the unreported, undiagnosed and untreated RTI's in this group of population creates a huge disease burden in the community.

While not all RTIs are curable, they are all preventable. The launch of National Rural Health Mission in 2005 and the integration of Reproductive and Child Health (RCH) programme- Phase II under NRHM was a significant initiative in improving rural health care delivery system. One of the important components of the RCH Program is to lead a healthy sexual life without any fear of pregnancy or contracting disease.

Many prevalence studies for RTI/STI based on symptoms have been conducted throughout the country in both rural and urban areas. But there is a paucity of community based studies from rural Tamil Nadu in recent years. This study was conducted to estimate the prevalence of RTIs based on syndromic approach among women of age group 18 to 45 years in a rural area of Kancheepuram District in Tamil Nadu.

OBJECTIVES

2. OBJECTIVES

1. To find out the Prevalence of Reproductive tract Infections among married women of age group, 18 to 45 years in a rural area of Kancheepuram District, Tamil Nadu, 2011

2. To find out if there is any association between sociodemographic, obstetric factors, contraceptive and personal, menstrual hygiene practices and Reproductive tract infections.

JUSTIFICATION

3. JUSTIFICATION

1. Reproductive tract infections including sexually transmitted infections are a common and serious health problem among women worldwide.

2. RTIs cause considerable discomfort and severe long term sequelae among women like pelvic inflammatory disease, cervical cancer, infertility, spontaneous abortion and ectopic pregnancy. RTIs/STIs are associated with increased transmission of HIV.

3. In poor and developing countries, over one-third of healthy life-years lost among women of reproductive age are due to reproductive health problems including sexually transmitted diseases and HIV/AIDS

4. The women of reproductive age group constitute about one fifth (22.2%) of the population of India. Therefore any unreported and untreated RTI's in this group of population creates a huge disease burden in the community.

5. NFHS 2 data estimates that 4 out of 10 currently married women in India report atleast one reproductive health problem which could be symptomatic of a more serious RTI.

6. According to DLHS-3, the percentage of women reporting symptoms of Reproductive tract infections is much higher in rural areas (7.5%) compared to urban areas (5.8%).[5]

7. There is paucity of data on prevalence of RTIs among married women in rural areas in Tamil Nadu.

REVIEW OF LITERATURE

4. REVIEW OF LITERATURE

The 4th International Conference on Population and Development (ICPD) held at Cairo, 1994 marked a fundamental shift in attitudes towards population growth and acknowledged the critical importance of reproductive health to development. It was recommended that the spectrum of services be enlarged to cover total reproduction period and integrated under the strategy of Reproductive and Child Health. Following this India launched the Reproductive and Child Health (RCH) Programme in 1996 to provide integrated services.[2]

The RCH approach has been defined as "People have the ability to reproduce and regulate their fertility, women are able to go through pregnancy and childbirth safely, the outcome of pregnancies is successful in terms of maternal and infant survival and well-being and couples are able to have sexual relations free of fear of pregnancy and of contracting diseases." (Fathalla, 1989). The RCH programme in addition to the components under Child Survival and Safe Motherhood Programme also included Control and Prevention of RTI/STI.[8]

4.1 REPRODUCTIVE TRACT INFECTIONS:

The term **Reproductive tract infections** refer to any infection of the genital tract. They affect both men and women. In women, it refers to infections of the external genitals, vagina, cervix, uterus, fallopian tubes and/or ovaries.[7] Reproductive tract infections are a broad term that includes sexually transmitted infections as well as other infections of the reproductive tract that are not transmitted through sexual intercourse.[9]

The identification of RTI/STIs as risk factors for the spread of HIV infection has contributed in a large extent to the global awareness of RTI/STIs. The incidence is relatively high in women of the age group 15-49 years; the number of AIDS (Acquired Immuno Deficiency Syndrome) cases is likely to continue to increase in the coming years. Worldwide, one million people die annually due to causes of RTI including STIs other than HIV/AIDS (UNFPA, 1997).[10]

4.2 PUBLIC HEALTH IMPORTANCE OF RTI'S:[11]

RTIs are widespread. The WHO estimates that each year, there are over 333 million new cases of curable STIs. In addition, UNAIDS calculates that in 2000 alone, 5.3 million people became infected with HIV. RTIs that are not sexually transmitted are considered even more common.[11]

RTIs result in numerous serious consequences, particularly in women. Pregnancy-related complications, as well as congenital infections, can result from RTIs. Pelvic inflammatory disease (PID) can develop, and can cause infertility, ectopic pregnancy, and chronic pain.

Certain infections can increase the chances of HIV transmission. Unfortunately, symptoms and signs of many infections may not appear until it is too late to avoid such consequences and damage to the reproductive organs.[11]

RTIs affect more than health. The morbidity associated with RTIs also affects the economic productivity and quality of life of many individual women and men, and consequently, of whole communities.[11]

4.3 CLASSIFICATION OF RTI'S:

4.3.1 Etiological classification:[11]

Etiologically, Reproductive tract infections (RTI's) refer to 3 different types of infections which affect the reproductive tract:

Endogenous infections: [11]

Endogenous infections result from an overgrowth of organisms normally present in the vagina. They are probably the most common RTI's worldwide. They include bacterial vaginosis and candidiasis. These infections can be easily treated and cured. They are common worldwide and are influenced by environmental, hygienic, hormonal and other factors.

Iatrogenic infections: [11]

Iatrogenic infections occur when the cause of infection is introduced into the reproductive tract through a medical procedure such as menstrual regulation, induced abortion and insertion of an intrauterine contraceptive device or during childbirth. This can happen if the surgical instruments used during the procedure have not been sterilized properly or an already existing infection in the lower reproductive tract is pushed through cervix into upper reproductive tract. Examples include Pelvic Inflammatory Disease following abortion or other transcervical procedures, infectious complications of pregnancy and postpartum period.

Sexually transmitted infections: [11]

These are infections caused by viruses, bacteria, fungi and parasites that are transmitted through sexual activity with an infected partner. STI's affect both men and women and can also be transmitted from mothers to children during pregnancy

and childbirth. HIV, the virus that causes AIDS is perhaps the most serious sexually transmitted infection. The list of pathogens which are sexually transmissible has expanded from the "classical" venereal diseases (Syphilis, Gonorrhoea, Chancroid, Lymphogranuloma venereum and Donovanosis) to include more than 20 agents. Examples include Trichomoniasis, Hepatitis virus B, Genital herpes and genital warts.

4.3.2 Anatomical classification: [12]

Anatomically, RTIs are classified into 2 types:

- **Upper Reproductive tract infections** (also called Pelvic Inflammatory Disease) which occurs in the uterus, fallopian tubes and ovaries and present with symptoms of vaginal discharge and lower abdominal pain

- **Lower Reproductive tract infections** which occur in the vagina and cervix and present as genital discharge and genital ulcerations [12]

4.4 DETERMINANTS OF RTIs: [13]

A framework developed by Judith Wasserheit and Ward Cates, helps us understand the range of factors that affect RTI patterns.

Microbiological determinants:

- Changes in vaginal flora

- Existence of other RTIs

- Hormonal factors (including cervical ectopy and mucus)

- Changes in the immune system (related to pregnancy or HIV)

Personal environments:

- Woman's sexual behaviour (includes age at first sexual intercourse, number of sexual partners, participation in commercial sex and partner's sexual behaviour)
- Health behaviour (including use of condom/ barrier methods, oral contraceptives, IUDs, intravaginal preparations)
- Health seeking behaviour

Macro-environmental factors:

Includes socio-economic, political, demographic, geographic and technological factors.

4.5 WOMEN ARE MORE VULNERABLE TO STI OR HIV:[14]

Physiologically:[14]

- Soft tissue in the female reproductive tract tears easily making it a transmission route for the microorganism
- The mucosal surface area of exposure is larger in females compared to males
- Vaginal tissue absorbs fluids more easily, including sperm, which has a higher concentration of HIV virus
- Women are more likely than men to have other untreated STI
- Influence of hormonal contraceptives

Socially:[14]

- Women often cannot control with whom or under what circumstances they have sex
- Women are not always empowered to discuss use of protection
- Women have less access to sexual health information and services

Economically:[14]

- Economically vulnerable women are more likely to end up in a dangerous relationship
- Women in poverty are often forced to exchange sex for money, food or other favours because of their economic situation
- On matters such as sexual practices, use of protection like condoms, household spending on health and access to healthcare, men tend to dominate the decision-making
- Women who are not employed are less likely to have access to money to seek health care, cover the cost of testing, counselling and prescription drugs

4.6 SYMPTOMS OF RTI:[14]

The following are the signs and symptoms of the most common RTI/STI in women and their causes.

- Unusual vaginal discharge: Bacterial vaginosis (BV), Chlamydia, Gonorrhoea, Trichomonas infection, Vaginal Candidiasis infection

- Blisters or ulcers (sores) on the mouth, lips, genitals, anus or surrounding areas: Chancroid, Genital herpes and Syphilis
- Dysuria (Burning or pain during micturition): Chlamydia, Genital herpes, Trichomonas infection and Gonorrhoea
- Warts or bumps on the genitals, anus or surrounding areas: Human Papilloma Virus (HPV) (Genital warts)
- Genital itching: BV, Trichomonas infection, Vaginal Candidiasis
- Abnormal and/or heavy vaginal bleeding: Chlamydia, Gonorrhoea (this symptom is often caused by factors other than STI)
- Bleeding after intercourse: Chlamydia, Gonorrhoea, Chancroid, Genital herpes
- Lower abdominal pain (pain below umbilical region or pelvic pain): Chlamydia, Gonorrhoea and mixed anaerobic infection
- Small, dimpled bumps or lesions on the skin that usually do not hurt or itch and are flesh coloured, but can vary from white to yellow to pink: Molluscum contagiosum
- Small, red lesions or ulcers in the genital or anal area; lymph node swelling in the genital area; chronic ulcers on the genitals or anus: Lymphogranuloma venereum (LGV).
- Red nodules or bumps under the skin of the mouth, genitals or anus that ulcerate, become tender and often bleed easily: Donovanosis
- Persistent vaginal candidiasis: HIV/ AIDS

- Jaundice and/or fever, headache, muscle ache, dark urine: Hepatitis B, Hepatitis C
- Dyspareunia (pain during sexual intercourse)

Vaginal discharge is one of the common presenting symptoms seen by doctors in many services (primary care, gynaecology, family planning, and departments of genitourinary medicine). Vaginal discharge may be physiological or pathological. It can be due to both infective and non infective causes. Although abnormal vaginal discharge often prompts women to seek screening for sexually transmitted infections (STIs), vaginal discharge is poorly predictive of the presence of an STI.

Vaginal discharge can be either physiological or pathological.[15]

Table 1: Causes of abnormal vaginal discharge:[15]

Infective organisms	Infective conditions	Other causes
• Candida albicans • Trichomonas vaginalis • Chlamydia trachomatis • Neisseria gonorrhoeae • Human papilloma virus • Primary syphilis • Mycoplasma genitalium • Ureaplasma urealyticum • Escherichia coli	• Bacterial vaginosis • Acute pelvic inflammatory disease • Postoperative pelvic infection • Post-abortal sepsis • Puerperal sepsis	• Hormonal contraception • Post partum • Malignancy • Personal habits and hygiene • Retained tampon or condom • Chemical irritation • Intrauterine device

4.7 COMPLICATIONS OF RTIs/STIs:[14]

Table 2: Complications of RTIs/STIs:

Complications in women:	Complications in neonates:	Systemic complications:
• PID • Infertility • Ectopic pregnancy • Spontaneous abortion • Stillbirth • LBW babies • Increased susceptibility to opportunistic infections • Cervical cancer • Chronic pelvic pain	• Ophthalmia neonatorum • Sepsis • Arthritis • Meningitis • Infant pneumonia • Mental retardation • Low birth weight (LBW)	• Gastrointestinal: proctitis, proctocolitis, enteritis • Renal: acute membranous glomerulonephritis • Neurological: meningovascular involvement, tabes dorsalis, GPI • Cardiovascular: myocarditis, aortitis, aneurysms • Ophthalmic: uveitis, iritis, choroidoretinitis • Musculoskeletal: osteomyelitis, arthritis, myopathy • Septicaemia

Untreated maternal syphilis was found to be associated with adverse pregnancy outcomes like perinatal deaths, stillbirths, preterm live births and neonatal deaths in studies by Watson-Jones et al.[16], McDermott J et al.[17] and Mullick S et al.[18] Hillier SL et al.[19] has reported that presence of bacterial vaginosis was related to preterm delivery of LBW infant. Christian P et al. has reported that Gonococcal infection in mother was associated with a 5-fold increase in neonatal eye discharge and preterm delivery.[20]

Apart from all these complications presence of symptoms of RTIs/STIs is associated with significant psychological distress (Jasmine JH et al.[21]) among women due to embarrassment and fear of rejection and stigma. They also constitute a substantial burden owing to their potential to disrupt daily activities and reduce women's overall well-being.

4.8 PROBLEMS IN MANAGEMENT OF RTI/STI (PIOT-FRANSEN MODEL):

The Piot and Fransen model of RTI/STI management sums up the problems in treatment of RTI and STI. This model illustrates the obstacles in RTI/STI control. The bottom bar represents all women with RTI/STI in a community and the bars above show how many women are identified at each step. The difference in each step describes the lost opportunities in stopping RTI/STI transmission.[14]

In the above figure, the comparison of the small top bar with the bottom one shows the proportion of all people with RTI/STI in the community who are identified and correctly managed at health facilities.

According to NFHS 2 data only 3 out of 10 women suffering from RTI/STI symptoms sought health care.[22] DLHS 3 data states that only 41% of those who had RTI/STI symptoms sought health care.[6] The figures show very little change in health seeking behaviour among women for RTI/STI symptoms.

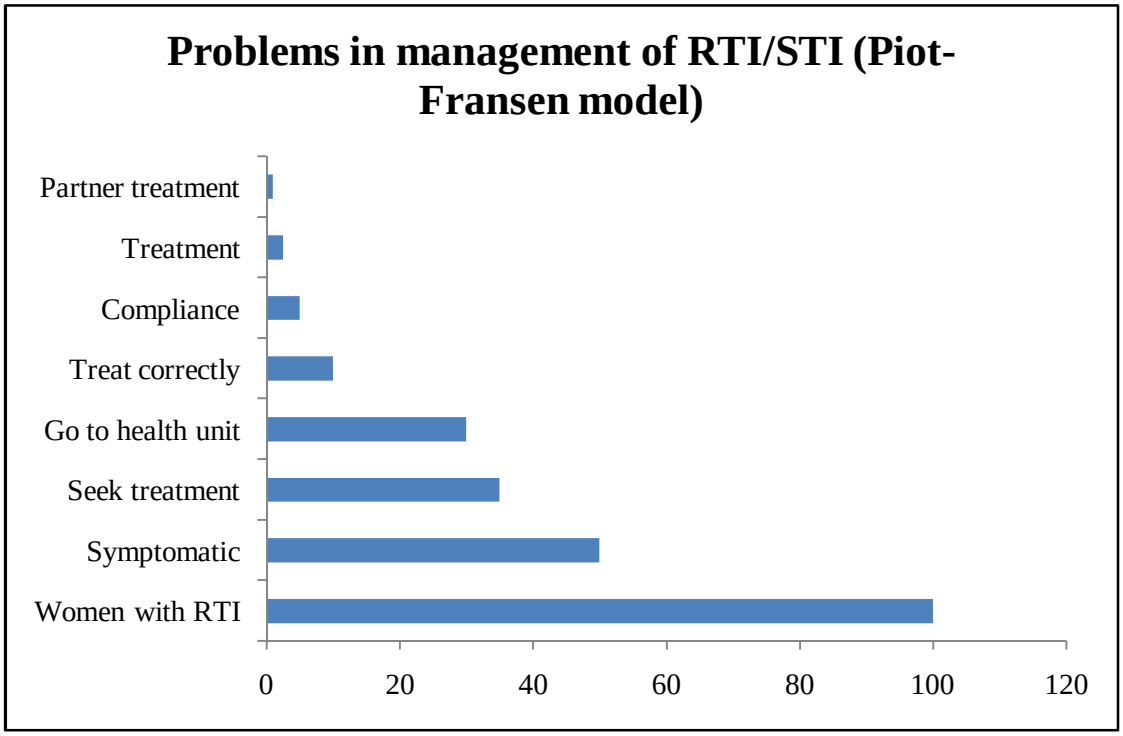


Figure 1: Problems in management of RTI/STI (Piot-Fransen model)

(adapted from Piot and Fransen in Grosskurth et al, 1994).

4.8 FRAMEWORK FOR INTERVENTION STRATEGIES:[13]

There are a few common elements for an interventional framework as follows:

Primary prevention of infections:

- Preventing STDs by delaying age at first intercourse, reducing the number of sexual partners and promoting condoms
- Preventing endogenous infections by improving knowledge of physiology and hygiene and encouraging appropriate use of antibiotics
- Preventing iatrogenic infections by improving the quality of abortions, IUD insertion and childbirth practices

Identification and/ or treatment of established infections:

- Standardized case management (taking into account the risk assessment component of the algorithms recommended)
- Identification and treatment of asymptomatic infections

Minimizing the complications of infection:

- Management of septic abortions
- Early identification and treatment of pregnant women with syphilis
- Cervical cancer screening and management

4.9 APPROACHES TO STI/RTI CASE MANAGEMENT:[14]

The two main approaches to RTI/STI diagnosis and management are

- The etiological approach
- The syndromic approach

4.9.1 The etiological approach:[14]

- These tests identify the specific infectious agent based on the results of laboratory tests, which then determines the treatment to administered

- Though reliable for the management of RTI/STI , it is not always available to health providers in the developing world especially at primary health care level because it depends on trained laboratory technicians, availability of lab supplies and in some cases expensive, specialised equipment
- Requires a second visit by the client to collect the results

4.9.2 The syndromic approach:[14]

- In this approach diagnosis is based on the identification of syndromes, which are combinations of the symptoms the client reports and the signs the health care provider observes
- The recommended treatments are effective for all the diseases that could cause the syndrome
- Provides single-dose treatment as far as possible
- Comprehensive: it includes patient education and counselling

Table 3: Comparison between Etiologic and Syndromic approach:[14]

S.No	Etiologic approach	Syndromic approach
1	Possible to get an exact diagnosis using laboratory tests	Diagnosis may be wrong in certain cases e.g. in case of vaginal discharge syndrome, the approach is not effective to manage Gonorrhoea and Chlamydia infection
2	Avoids overtreatment	Over-treatment of patient as well as partner may happen
3	Patient must return for test results and must wait for treatment till the lab results comes	The patient is diagnosed and treated in one visit
4	More chances of lost to follow up	No loss to follow up
5	Expensive as trained laboratory technicians as well as infrastructure and supplies are needed	Relatively inexpensive as it avoids use of laboratory tests

4.10 SYNDROMIC MANAGEMENT- INTRODUCTION:[14]

The Syndromic Management approach was first introduced in 1991. Since then it has been implemented in many countries through numerous programmes and research and evaluation projects supported by the WHO, UNAIDS (Joint United Nations Program on HIV/AIDS), the Commission of the European Communities, Medical Research Council (U.K.), USAID (US Agency for International Development) and others.

The Syndromic management approach is a practical way to diagnose and treat RTI/STI cases while helping to prevent further spread of the diseases. According to WHO, the flowcharts suggested for Syndromic management are based on epidemiological studies conducted throughout the industrialized and developing world and a number of validation comparisons of syndromic diagnosis with laboratory-assisted diagnosis have found them to be similar in terms of accuracy.

4.10.1 Specific relevance of Syndromic Management to RTIs/STIs:[14]

- STIs/RTIs are a **public health problem,** not about one individual
- Dealing with 1 STI case is an opportunity to treat at least 1 more case
- STI patients are hesitant to approach doctors
- Often choose far-off doctors and do not prefer to revisit
- First visit may be the last chance
- If opportunity missed the first time- it is like pushing the client towards HIV (2-9 times)

Table 4: Common RTI/STI syndromes in women: [14]

Syndrome	Symptoms	Signs	Most common causes
Vaginal discharge	Unusual vaginal discharge Vaginal itching Dysuria Dyspareunia	Abnormal vaginal Discharge	VAGINITIS: – Trichomoniasis – Candidiasis CERVICITIS: – Gonorrhoea – Chlamydia
Genital ulcer	Genital sore	Genital ulcer Syphilis	Syphilis Chancroid Genital herpes
Lower abdominal pain	Lower abdominal pain Dyspareunia	Vaginal discharge Lower abdominal tenderness Temperature >38°	Gonorrhoea Chlamydia Mixed anaerobes
Inguinal bubo	Painful enlarged inguinal lymph nodes	Enlarged inguinal lymph nodes Fluctuation Abscesses or fistulae	LGV Chancroid

Figure 2: Syndromic management kits:

(Figure 2 Source: http://www.tansacs.in/Images/STI_Pic.jpg)

4.11 GLOBAL BURDEN:

RTIs and STIs including HIV are imposing an increasing burden not only on public health but also on the world's economies, especially those of developing countries. Though there is adequate data on the worldwide prevalence of HIV and other STIs, similar estimates of other RTIs are minimal. Studies from various parts of the world present a wide range of prevalence of RTIs.

WHO Prevalence estimates for the year 1995, reported that at any point of time in 1995, on average there were 27 million people infected with syphilis, 22 million with Gonorrhoea, 81 million with Chlamydia and 107 million with Trichomoniasis. Geographically, the vast majority of these cases were in the developing world reflecting the global population distribution. South and South East Asia, which accounted for 57.2% of the global population in the 15-49 age group in 1995, accounted for 48.7% of new infections (115.5 million cases). Sub-Saharan Africa accounted for another 21.1% (50.0 million) and Latin American and the Caribbean 9.7% (23.0 million). The sex distribution of these cases was skewed towards females- 55% of the cases of syphilis, 58% of the cases of gonorrhoea, 60% of the cases of Chlamydia and 92% of the cases of trichomoniasis were in females.[23]

According to WHO estimates for 2005, the total number of new cases of 4 STIs in adults between the ages of 15 and 49 years was 448 million. This included 101 million cases of C. Trachomatis, 88 million cases of N. Gonorrhoeae, 11 million cases of Syphilis and 248 million cases of T. vaginalis.[3]

In addition at any point in 2005 there were approximately 318 million prevalent cases of the 4 STIs in adults: 98 million with C. Trachomatis, 31 million with N. Gonorrhoeae, 36 million with Syphilis and 153 million with T. Vaginalis.[3]This data shows a substantial increase from 1995 estimates.

In the developing world the prevalence of the 4 major sexually transmitted infections were 188 million cases of Trichomoniasis, 101 million cases of Chlamydia, 74 million cases of Gonorrhoea and 14 million cases of Syphilis. These figures are projected to increase to 202 million cases of Trichomoniasis, 108 million cases of Chlamydia, 80 million cases of Gonorrhoea and 16 million cases of Syphilis by 2015.[24]

Deeb ME et al (1998) reported that the prevalence of self reported abnormal vaginal discharge was 24.5% in a rural community of Lebanon. Lower abdominal pain was the commonest symptom reported (41.1%) followed by pain after intercourse (40.7%).[25]

In a community-based, cross-sectional study in the rural districts in coastal, highlands and jungle districts of Peru (1997-98), by Garcia PJ et. al. 77% of women had symptoms indicative of RTIs and 70% had objective evidence of one or more RTIs. Lower abdominal pain was the commonest self reported symptom (29.3%) followed by abnormal vaginal discharge (22.9%). [26]

Msuya SE et al. (1999) reported from a cross-sectional study in Moshi, Tanzania that 64% of women attending primary health care clinics had atleast one RTI and 22.5% had multiple infections. Almost 27% of the women had atleast one STI (C.trachomatis, N. gonorrhoea, T.vaginalis and T.pallidum).[27]

Riyami AL et al. in a study conducted as part of the National Health Survey among ever-married Omani women (2000) reported the prevalence of lower reproductive tract infections as 22.4% and upper reproductive tract infections as 2.7%.[28]

Clark JL et al. (2003-05) used the syndromic management approach to assess the prevalence of STI symptoms in Peru and reported the prevalence to be 42.2% for dysuria, 32.6% for genital discharge and 6.3% for genital ulcer among women.[29]

Garcia-Perez H et al (2005) reported that 6% of married women in Mexico experienced constant or intermittent pelvic pain and 12% reported having pain during intercourse or within 24 hours afterwards in the previous 12 months.[30]

Rabiu KA et al. (2008) reported from a cross-sectional study conducted among women attending FP clinics in Lagos, Nigeria, 37.4% of RTI related symptoms in the previous six months. Vaginal discharge was the commonest symptom reported (21.8%).[31]

A community-based, cross-sectional study (2010) in Egypt (Oka A. Akl et al.) revealed that 75.6% of women experienced atleast one gynaecological problem. The most commonly reported gynaecological problems were symptoms of lower RTIs, reported by 51.2% of sampled women.[32]

4.12 SOUTH EAST ASIAN REGION (SEAR) ESTIMATES:

Prevalence of STIs in adult females in 2005 in SEAR: [3]

- C. trachomatis 1.09%
- N. gonorrhoeae 0.75%
- Syphilis 1.37%
- T. vaginalis 5.58% [3]

Incidence in 2005:

- C. trachomatis 9.20/1000 females
- N. gonorrhoeae 16.32/1000 females
- Syphilis 3.33/1000 females
- T. vaginalis 40.30/1000 females [3]

Balsara ZP et al. (1998) reported in a study on RTI among Afghan refugee women that vaginal discharge was the commonest self-reported symptom (76.5%). Over three-fourths (76.7%) of those who reported to the health clinics with reproductive complaints had an RTI. Nearly half (49.5%) of these women were diagnosed with some form of vaginitis.[33]

Yang LR et al. reported that in a community based study conducted in rural western China 70.3% of the interviewed women reported complaints of malodorous vaginal discharge.[34]

Bonetti TR et al. (2002) reported a prevalence of 33.6% of RTI/STI symptoms in rural areas of Far-western Nepal.[35]

4.13 BURDEN IN INDIA

Reproductive ill-health accounted for half of all illness-days and for 31% of total curative health expenditure. The 1990 Global Burden of Disease study estimated that 27.4% of disability-adjusted life years (DALYs) lost in Indian women aged 15–44 years were attributable to reproductive ill-health. (Bhatia J and Cleland J, 2001).[36]

Published STI rates among ever-married women in India based on community-based studies report prevalence ranges of 0.0 to 4.2% for gonococcal infections, 0.5 to 28.7% for Chlamydia trachomatis, 0.2 to 8.8% for syphilis, 4.3 to 27.4% for T. vaginalis and 11.8% for clinical diagnosis of HPV.[37]

Reproductive and Child Health – Rapid Household survey (RCH-RHS) (1998-1999) estimated a prevalence of 29.7% of RTIs/STIs in India. The prevalence in Tamilnadu was higher than the national prevalence (36.5%).[38]

Garg S et al. (1996-2000) reported a prevalence of self reported gynaecological morbidity as 88% in New Delhi from a community based study in an urban slum.[39]

An ICMR Task Force study by Kambo IP et al. (1996-1997) across 23 districts in 14 States/Union territories found that 24.4% of women reported symptoms of RTI. This study showed a significant trend of increasing gynaecological complaints with increasing age.[40]

NFHS-2 estimates revealed a high reported prevalence of reproductive health problem across women in all socioeconomic groups of populations. Nearly 4 out of 10 currently married women in India reported atleast one reproductive health problem that could be symptomatic of a more serious RTI. The reported prevalence of currently married women with any reproductive health problem varied from 19% in Karnataka to 67% in Meghalaya.[22]

A Community based, laboratory supported STI/RTI prevalence study by ICMR-NACO, in 2002-2003 showed that 6% of adult Indian population suffer from STI/RTI in a year which adds to about 30 million episodes per year. [14]

Singh S (2002-2003) reported a prevalence of 46% in a study conducted by IIPS in rural areas of Maharashtra.[41]

DLHS 2 reported a prevalence of 32.3% of RTI/STI symptoms among married women of reproductive age group and the prevalence was higher in rural areas (33.7%) compared to urban areas (29.3%). (In Tamil Nadu 17.1%).[42]

Patel V et al. reported a prevalence of abnormal vaginal discharge as 14.5%s from a community-based study among married women of Goa (November 2001 to May 2003). 60% women had another co-existing gynaecological complaint.[43]

DLHS 3 reported a prevalence of 18.2% of RTI/STI symptoms among ever married women. (Rural 19.6% and Urban 15.0%).[6]

4.14 REPRODUCTIVE TRACT INFECTIONS- TAMILNADU

Rangaiyan G and Sureender S et al. (1996), in a community-based cross-sectional study in Salem found that approximately 76% reported atleast one current symptom of gynaecological problem. 25% of women reported to have white or coloured discharge and 19% reported symptoms suggestive of acute PID.[44]

Data obtained from Reproductive and Child Health-Rapid Household Survey (RCH-RHS-1&2) conducted in 1998-99 estimated that in Tamil Nadu, the prevalence of any one symptoms of RTI/STI is 36.3% which was relatively higher than the national level (29.7%). The prevalence of abnormal vaginal discharge was 32.2%, burning sensation 7.8% and lower abdominal pain 6.7%.[10]

Ravindran TKS et al. reported from a study in Dharmapuri district that 44.5% reported atleast one symptom of reproductive morbidity. White discharge was reported by 30% and lower abdominal pain by 10%.[45]

Prasad JH et al. (1996-1997) reported a high prevalence (53%) of symptoms of RTIs among young women in a rural area of Vellore District, Tamil Nadu. 45% of the symptomatic were found to have RTIs according to laboratory investigations.[46]

4.15 SYNDROMIC MANAGEMENT-EFFECTIVENESS:

Many studies worldwide have identified that Syndromic management offered enormous advantages compared to the traditional approach. Colvin M et al. (2002-2003) report in their study that syndromic packages improved the overall syndromic management of STI by increasing the supply of condoms and partner notification. It also improved the thoroughness of STI education, especially in females.[47]

In a study in South Africa, (Htun Y et al.) the syndromic management protocols provided adequate treatment for more than 90% of patients with genital ulcer.[45] Djajakusumah T et al., (Indonesia) reported that the syndromic approach resulted in a low cost per real case treated. In addition, the cure rate for urethral discharge with the syndromic approach was 99%.[48]

A community-based, cross-sectional study in Vietnam by Go VF et al. (1998), estimated that about half of the study population (51.8%) experienced abnormal genital itching or vaginal discharge in the past 6 months and there was a significant association of self-reported genital itch or vaginal discharge with bacterial vaginosis (OR=2.1; 95% CI=1.1, 4.1).[49]

4.16 SYNDROMIC APPROACH- SHORTCOMINGS:

Choudhry S, Ramachandran VG et al. reported a high sensitivity of syndromic approach for treatment of N. gonorrhoeae and C. Trachomatis (91.83% and 96.5% respectively) but a low specificity (72-76%) which indicates that individuals were falsely diagnosed and treated. They also report low sensitivity of Genital discharge syndrome in detecting T. Vaginalis (50%), HSV-2 (5.9%) and Candida (50%).[50]

Ray et al. reported from a study conducted at Delhi that though a high proportion of women were diagnosed by syndromic approach, their total infection load as determined by etiological diagnosis was quite low. The sensitivity of the syndromic approach for Vaginal discharge syndrome in this study was 93.8%, but the specificity of this method in diagnosing vaginal discharge was only 37.5%.[51]

Vishwanath S et al. in their study evaluating the syndromic management of vaginal discharge among women attending a reproductive health clinic in Delhi found that no infections were detected in 40.1% of women. They reported that the algorithm

led to the correct management of most cases of Bacterial vaginosis and Trichomoniasis but was not much helpful in predicting cervical infection. Only 2 cases of C trachomatis were correctly managed (sensitivity 5%, specificity 93% and PPV 9%.[52]

Hawkes S et al. (Bangladesh, 1995) reported that the WHO algorithm of syndromic approach had a high sensitivity (100%), but a low specificity (0 for bacterial vaginosis, Candida and T. vaginalis). They estimated that between 36% and 87% of costs would have been spent on uninfected women.[53]

While different studies suggest concerns related to unnecessary antibiotic use resulting from the low diagnostic specificity of syndromic management, it remains an inexpensive and readily available method for the diagnosis and treatment of symptomatic STIs in both developing and developed countries.[26,29]

Although the syndromic approach has drawbacks, it is an essential component of STI/RTI management where resources are limited.

An important advantage is that this approach helps to ensure that the patients get effectively treated at their first and probably only contact with the health system. This also means treating for several possible infections even if the patient has only one.

4.17 INTERVIEW BASED MEASUREMENT OF PREVALENCE OF RTI:

The WHO definition of health has formally moved our understanding of health beyond the physical dimension to include social and psychological well being as an intrinsic part of health. In recent times, it has been understood that the measurement of morbidity should be expanded beyond the concept of disease to a

concern with the individual experience of ill health within its social context.[54]This explains the need to recognise the distress and discomfort experienced by the women who suffer from symptoms of RTIs/STIs.

According to CDC the prevalence of RTI can be measured as the number of persons diagnosed with a specific RTI identified by syndromic signs/symptoms or etiologic methods at a given point in time in a population subgroup.[55]

In conventional health interview surveys, participation rates are usually around 90% in low income countries but much lower in Europe and North America (60-70%). When a clinical component is added or biological specimens are required, participation can drop dramatically. The participation rates depend on the characteristics of the study population, the degree of community involvement in the project, the intrusiveness of the procedures and their location (for example, at home or at the nearest clinic).[56]

Sadana R (Bulletin of WHO, 2000) discusses the application of interview-based measurement techniques to facilitate community-based data collection. The author lists out the following merits of household interview approach in estimating prevalence of morbidity over approaches that rely on hospital statistics or medical examinations:

- a greater breadth of the population is covered with higher response rates and lower cost,
- interpretation of findings is simplified and
- generalization to the source population is achieved given the population-based sampling frame and strategy.[57]

4.18 SOCIODEMOGRAPHIC FACTORS AND REPRODUCTIVE TRACT INFECTIONS:

Age is considered to be an important risk factor for transmission of RTI/STI because the vaginal mucosa and cervical tissue of young women is immature and make them vulnerable than older women. A younger age at marriage is also associated with lack of awareness regarding preventive measures and lesser control over their sexual and reproductive health.

Educational status and employment status play an important role in empowering women and thereby enabling them to make informed choices regarding their reproductive life.

Oka A. Akl (2010) showed a significant association of reproductive morbidity with age of women (highest prevalence in age group 20 to 29 years, $p<0.05$), education (majority affected were illiterate, $p<0.01$), age at first conception and duration of marriage.[32] Age < 35 years was reported to be a risk factor for pelvic pain by Garcia-Perez H et al. in Mexico.[30]

NFHS 2 data found a significant association between prevalence of RTIs and the age at marriage (those married before 15 years had a higher prevalence compared to those married after 19 years); education of women and that of husband.[5]

Kosambiya JK et al. reported the prevalence of RTI to be 53% from a community based study in the rural area of Surat. Among these women, majority were in the age group of 26 to 30 years. The prevalence was higher among housewives (81%).[58]

Kumar S et al. (1997-1998) reported a high prevalence of RTI symptoms among women in Bundi District of Rajasthan. Overall, 47% of ever-married women aged 15-45 years reported atleast one symptom of RTI at the time of survey. A large proportion of women were in the sexually active age group of 20-29 years (41%)..[59]

Rathore M et al. reported a prevalence of 22.3% of reproductive morbidity among women in rural Rajasthan. They also found a significant association of RTI with increase in age and lower educational status.[60]

Dawn A et al. (2000-01) reported a very high prevalence of RTI symptoms in rural areas of Singur block of West Bengal.[61]

Ravindran TKS et al. reported a higher prevalence of reproductive morbidity among women living in nuclear families (48.8%) compared to those who live in joint and extended families (39.5%).[45]

Sharma S et al. (December 2001-March 2002) reported that the prevalence of RTIs/STIs in a rural area of Sirmour district in Himachal Pradesh was high (51.9%). The prevalence was maximum in the age group 25-34 years and this difference was statistically significant. [62]

Samanta A et al. (2006-07) reported a prevalence of 13.5% of RTI/STI symptoms among women in Hooghly, West Bengal. Abnormal vaginal discharge was the commonest symptom reported (7.5%).[63]

4.19 OBSTETRIC HISTORY AND REPRODUCTIVE TRACT INFECTIONS:

Oka A. Akl reported a significant association with age at first conception (those who had their first conception between 20-24 years were less affected than those who had their first conceptions at younger or older ages).[32] Garcia-Perez H et al. reported a significant association between pelvic pain and history of Caesarean section.[30]

Agrawal S reported based on NFHS 2 data that number of children ever born, time since last birth, women's current age were associated with reproductive health problems.[64] Similar association of RTI with parity was also reported by Ravindran TKS et al.[45], Rathore S et al.[60] Sharma S et al.[62] Kumar S et al.[59]

4.20 ABORTIONS AND REPRODUCTIVE TRACT INFECTIONS:

Induced abortion represents an important aspect of women's reproductive health. Under the 1971 Medical Termination of Pregnancy Act, women in India can legally obtain induced abortion on physical, mental and psychological grounds. But though induced abortion is legal, it is largely unsafe and unavailable[65]. In 1994, governments declared for the first time that addressing unsafe abortion was a public-health imperative.

The most common complications from unsafe abortion are incomplete abortion, excessive blood loss and infection. Less common but very serious complications include septic shock, perforation of the intestines and inflammation of the peritoneum. Because poor and rural women tend to depend on the least safe methods and providers, these women are most likely to experience severe complications from unsafe abortion.

WHO estimates that 80 million unplanned pregnancies occur each year. Approximately 26 million of these pregnancies are terminated legally and 20 million through unsafe, non-legal means, primarily in developing countries (97%).[66]

Agrawal S, based on analysis of NFHS 2 data reported that incidence of any reproductive health problem was 1.5 times higher (OR 1.46; 95% CI 1.33-1.60; P<0.001) among women who had one induced abortion compared with women who had no induced abortion history, increasing to 1.9 times higher (OR 1.85; 955 CI 1.52-2.27; P<0.001) among women who had two or more induced abortions after adjustment for sociodemographic and maternal factors.[64]

Zhang RJ et. al. reported that rural women who underwent more induced abortions were more likely to suffer from RTIs, especially cervical infection and PID. They showed that women of Anhui Province in China who underwent induced abortions had a higher prevalence of RTIs.[67]

Xueqiang F et al. (2007) reported significant association between 3 or more abortions and candidiasis and bacterial vaginosis in rural China.[68]

4.21 CONTRACEPTIVE USE AND REPRODUCTIVE TRACT INFECTIONS

Family planning is critical to prevent unwanted pregnancies and unsafe abortions and reduce maternal mortality and child mortality and to reduce poverty, and also empower women to choose when and with whom to have children. Family planning methods are related to RTIs in many ways,

- symptoms of infection may be attributed to contraceptives and might thus change attitudes towards contraception

- certain contraceptive methods may create risks for infection or worsen pre-existing RTIs

- the contraceptive methods that best protect against pregnancy are not the same that best prevent STIs including HIV infection.[11]

Oral contraceptive pills (especially the high dose pills) can disrupt the balance of the vaginal environment and predispose to development of Candidiasis. OCPs along with hormonal implants and Injectables may decrease risk of PID, but does not protect against STIs. Diaphragms with or without spermicide offer some partial protection against cervical infection with bacterial STIs. IUDs when inserted with improperly sterilized instruments or in a woman with untreated RTI can introduce infection into the uterus. Female sterilization carries the risk of iatrogenic infection if instruments are not properly sterilized.

The male latex condom is the single, most efficient, available technology to reduce the sexual transmission of HIV and other sexually transmitted infections.

Ever use of Contraceptive Methods:

NFHS 3 Report on ever use of contraception shows that atleast two-thirds currently married women have used a family planning method at some time in their lives. Women are much more likely to have used a modern method (58%) than a traditional method (19%). Female sterilization is by far the most commonly used modern method (37%) among currently married women. The three modern spacing methods (pill, IUD, and condom) have ever been used by 11, 6, and 14 percent of women, respectively.[69]

Current Use of Contraceptive Methods:

The contraceptive prevalence rate in India is 56%. 86% of current users are using modern methods and the remaining 14% are using traditional methods. Female sterilization accounts for two-thirds of total contraceptive use. The use of the family planning programme's three modern spacing methods together accounts for 18% of the contraceptive prevalence rate.[69]

Egbe CA et. al. (Nigeria) reported a 1-7 fold increase in the risk of RTIs among contraceptive users compared with non contraceptive users. Among the contraceptive users, Intrauterine device (IUD) users (53.07%; p= 0.032), users of contraceptives for less than 1 year (60.00%; p= 0.003) and those in age group of 26-30 years (68.18%; p= 0.0001) had higher prevalence of RTIs. Candida albicans was the most prevalent etiologic agent among contraceptive users.[70]

Wasserheit JN et al. (1989) reported from a study in rural Bangladesh that users of intrauterine devices and tubectomy were each approximately four times as likely to report symptoms and seven times as likely to have examination-confirmed infection as nonusers.[71] Garcia-Perez H et al. also reported that current use of IUD was associated with pelvic pain.[30]

Sowmini et al. reported that symptoms of RTIs were more among contraceptive users compared to non-users and specifically a higher proportion of IUD users had these problems as compared to acceptors of the female sterilisation procedure.[72] Riyami et al. also reported a positive association of RTI with IUD use.[28]

Smart S et al. reported in their study on Social and sexual risk factors for bacterial vaginosis among women attending Sydney Sexual Health Centre during March to July 1999, that women with BV were significantly less likely to be using hormonal contraception ($p<0.0001$), more likely to use IUD ($p=0.003$) or nil/inadequate contraception ($p=0.02$) than those who did not have BV.[73]

Patel V et al. in a community based study on risk factors for vaginal discharge in Goa (Nov 2001 to May 2003) found a significant association with use of IUCD (0.04).[74] Similar association was also reported by Rathore M et al in rural Rajasthan.[60]

Warner L et al reported from a systematic review of studies that condom use was associated with reduced risk of Gonorrhoea and Chlamydia infections.[75]

Hawkes et al. found in their study on prevalence of RTIs among women attending NCH/FP clinics with suggestive symptoms that women with intrauterine devices or tubectomy were more likely to have an endogenous infection than those using no contraception (not significant), whereas those using condoms were less likely to have an infection (p=0.04) and no evidence of confounding with age was found in the association between contraception and endogenous infections.[53]

4.22 PERSONAL AND MENSTRUAL HYGIENE AND REPRODUCTIVE TRACT INFECTIONS

Riyami AL et al. examined the effect of personal hygiene among menstruating Omani women and reported that low personal hygiene was positively associated with presence of at least one RTI.[28]

Yang LR et al. correlated the personal hygiene habits of women in rural China with vaginal discharge and found that women who bathed or cleaned perineum for once or less than once a week and those who cleaned their underwear for once or less than once a week were more likely to report abnormal vaginal discharge (Chi-square value: 4.33, P=0.038 and Chi-square value: 14.13, P=0.000 respectively). A logistic regression of factors showed that the following factors were significantly associated with vaginal discharge- knowledge of RTIs, cleaning perineum, stress and anxiety, bathing or cleaning perineum, family income and educational level.[34]

Singh S et al. reported from a community-based, cross-sectional study among in-migrant, ever-married women in a rural slum of Dehradun, that RTI symptoms i.e. vaginal discharge, itching, boils, pain abdomen, pain during sexual intercourse, backache, lymph node enlargement were strongly associated ($p<0.001$) with menstrual hygiene practices of re-using cloth.[76]

With above background of information this study was conducted to find out the prevalence of RTIs among married women in the age group 18 to 45 years, based on the presence of symptoms of RTI/STI in a rural area of Kancheepuram District and to find out if there is any association between RTI and sociodemographic factors, obstetric history, contraceptive usage, personal and menstrual hygiene practices.

METHODOLOGY

5. METHODOLOGY

STUDY DESIGN	**:**	Community based**,** Descriptive, Cross-sectional study
STUDY AREA	**:**	Karanai Puducheri Panchayat village, Kancheepuram District
STUDY PERIOD	**:**	March 2011 to November 2011
STUDY POPULATION	**:**	Married women in the age group 18 to 45 years
Inclusion Criteria	:	Married women in the age group 18 to 45 years in Karanai Puducheri village

Exclusion criteria:

- women with diagnosed gynaecological problems (like carcinoma cervix, fibroid uterus, uterine prolapse)
- women who were not willing to participate in the study.
- women who could not be contacted after 3 visits

SAMPLE SIZE

The sample size was calculated based on the Prevalence of RTI among married women in 15 to 45 years in Veerapandi Panchayat Union, Salem District, Tamil Nadu (Indian Journal of Comm Med, 32(2), April 2007)[77] which was 44.6%, with an allowable error of 10% using the formula,

$$N = \frac{Z^2_{1-\alpha/2}\,[P\,(1-P)]}{d^2}$$

N	:	Required sample size
Confidence level	:	95%
Significance level (α)	:	100- Confidence level= 100-95= 5% or 0.05.

$Z_{1-\alpha/2}$ at 0.05 : 1.96

P: Prevalence : 44.6%

1-P : 55.4%

d : tolerable level of error (as % of P) : 10% of 44.6% = 4.46

N= (1.96 X 1.96 X 44.6 X 55.4) / (4.46 X 4.46)

= 9492 / 19.9 = 476.9

Assuming 10% non response, the sample size was calculated as 525.

SAMPLING METHOD

Kancheepuram District is divided into 13 Blocks which consist of 648 Village Panchayats. Among the 13 blocks, Kattankolathur block was chosen by lottery method. Kattankolathur block consists of 39 Village Panchayats. Among these 39 Village Panchayats, Karanai Puducheri Village Panchayat was chosen by lottery method.

Karanai Puducheri Village Panchayat has a population of 10415, with 5826 males and 4589 females. This population is spread over 5 villages which constitute Karanai Puducheri Village Panchayat- Anna Nagar, Karanai Kattur, Karanai Puducheri, Karanai Puducheri colony and Vinayagapuram.

A line listing was prepared of the married women in the age group 18 to 45 years from the latest Census list. From a list of 1733 women thus obtained a simple random sample of 525 women was chosen by Computer generated random numbers. These women were then visited in their households and requested to participate in the study. The participants were given an information sheet in Tamil regarding the purpose of the study and explained and an informed written consent was obtained from them.

DATA COLLECTION METHODS

Permission to conduct the study was obtained from The Director, Institute of Community Medicine, The Dean, Madras Medical College and the Institutional Ethics Committee.

A semi-structured questionnaire modified from the Ever-married women's questionnaire in DLHS 3 was devised in English and translated into Tamil and then back translated into English for accuracy and consistency. The Tamil questionnaire was pretested for clarity and reliability among a few women similar to the study population and standardized. This questionnaire was administered to the respondents and their responses were recorded. On an average 10 to 15 women were visited per day. The participants who could not be interviewed on the scheduled day were given 2 more visits and interviewed.

The questionnaire was divided into 5 sections:

1. **Socio demographic characteristics**

   This section comprised details of age of the participant and their husbands, their marital status, age at marriage, duration since marriage, educational status of participant and husband, work status of participant, type of family, total number of members in the family and total monthly income of the family.

2. **Perceived symptoms of RTI**

   This section contained questions regarding experience of symptoms of RTI in the past 1 year.

3. **Obstetric history**

This section contained questions about number of conceptions, age at birth of first child and last child and a detailed obstetric history with outcome (live birth/ still birth/ abortion).

4. **Contraceptive practices**

This section contained questions on permanent sterilisation, practice of modern spacing methods in the past and present.

5. **Personal and menstrual hygiene practices**

In this section women were enquired about personal hygiene, type of napkins used during menstrual periods, reuse of napkins, washing and drying practices of napkins to be reused.

The participants were given health education and those who reported symptoms of RTI were referred to the nearest Government health centre.

DIAGNOSIS OF RTI

A diagnosis of RTI was made if the participant had experienced one of the following symptoms in the past 1 year: abnormal vaginal discharge, ulcers or boils in and around the genital region, pain in lower abdomen which was not related to menses, pain or burning sensation during urination, swelling in the groin and painful blister like lesions in and around vagina. Among currently married women, pain during sexual intercourse and spotting after sexual intercourse was also taken to be indicative of RTI.

Abnormal vaginal discharge was defined as vaginal discharge accompanied by itching, irritation around the vaginal area, abnormal colour, texture, bad odour, severe lower abdominal pain, fever or by any other problem.[78]

DATA ENTRY AND ANALYSIS

The data was entered in Microsoft Office Excel 2007. Analysis was carried out using Statistical Package for Social Sciences (SPSS for Windows Version 12.0). Relevant prevalences were calculated and tabulated. Cross tabulations were done to assess factors associated with Reproductive tract infections. Chi-square test was used to analyse the categorical variables. Fisher's exact test was used when the the individual values in any of the cells was less than 5. A P value of less than 0.05 was considered significant. The following variables were considered—participant's age, age at marriage, duration of marriage, religion, educational status of participant, family type, socioeconomic status, age at first conception, number of live births, number of abortions, ever use and current use of contraceptive methods, personal and menstrual hygiene practices.

RESULTS

6. RESULTS

The required sample size for this study was 525. The number of women interviewed was 520 which was 99% of the requisite number.

The mean age of the participants was 29.5 years with a standard deviation of 6.9 years. The mean age of their husbands was 35.1 years with a standard deviation of 8.1 years. The mean age at marriage of participants was 21 years with standard deviation 3.5 years.

6.1 BACKGROUND CHARACTERISTICS:

Table 5: Background characteristics

Characteristic	Number (n=520)	Percentage (%)
Age		
18 to 20 years	28	5.4
21 to 25 years	162	31.2
26 to 30 years	138	26.5
31 to 35 years	85	16.3
36 to 40 years	54	10.4
41 to 45 years	53	10.2
Marital status		
Living with husband	489	94
Widowed or separated or divorced	31	6
Age at marriage		
Less than 18 years	62	11.9
18 years and above	458	88.1

Table 5: Background characteristics (Continued):

Characteristics	Number (n=520)	Percentage (%)
Duration of marriage		
Less than 1 year	25	4.8
1 to 5 years	233	44.8
6 to 10 years	97	18.7
More than 10 years	165	31.7
Religion		
Hindu	442	85
Muslim	35	6.7
Christian	43	8.3
Participant education status		
Illiterate	42	8.1
Primary School	81	15.6
High School	209	40.2
Higher secondary education	89	17.1
College education	99	19.0
Occupational status		
Working	100	19.2
Not working	420	80.8
Socioeconomic status		

Per capita income	Socioeconomic class	Number (n = 520)	Percentage (%)
Rs. 2830 and above	Class I	117	22.5
Rs. 1415 – 2829	Class II	183	35.2
Rs. 850 – 1414	Class III	138	26.5
Rs. 425 – 849	Class IV	78	15
< Rs. 425	Class V	4	0.8

In total 520 women participated in the study. Majority of the participants were in the age group 21-25 years (31.2%) followed by 26-30 years age group (26.5%). 94% of the participant women were living with their husbands. The remaining 6% were widowed/ separated or divorced. 11.9% of the participants were married before the age of 18 years, majority of them (88.1%) were married after 18 years.

Duration of marriage: 44.8% of the women (233) were married for 1 to 5 years. 4.8% (25) were married for less than a year, 18.7% (97) were married for 6 to 10 years and 31.7% of the women (165) were married for more than 10 years.

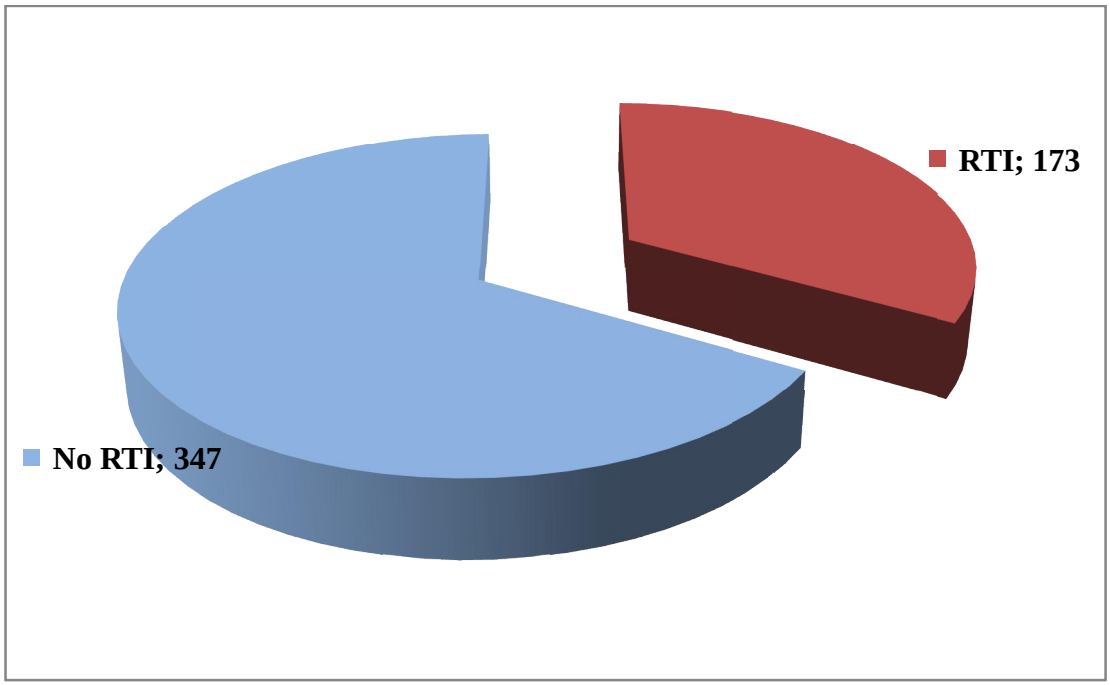
Among the participants 85% were Hindus, 8.3% were Christians and 6.7% were Muslims. Educational status of the participants was as follows: 8.1% were illiterate, 15.6% had completed 1 to 5 years (Primary School) of formal education, 40.2% had completed 6 to 10 years (High School) of education, 17.1% had completed higher secondary education and 19% had completed college education.

Occupational status: 19.2% (100) of the women were working and 80.8% (420) were not working.

Socioeconomic status was classified from monthly per capita income based on Modified B. G. Prasad scale for rural area. According to this classification, 117 (22.5%) participants belonged to Class I, 183 (35.2%) participants belonged to Class II, 138 participants (26.5%) belonged to Class III, 78 (15%) participants to Class IV and 4 (0.8%) participants to Class V.

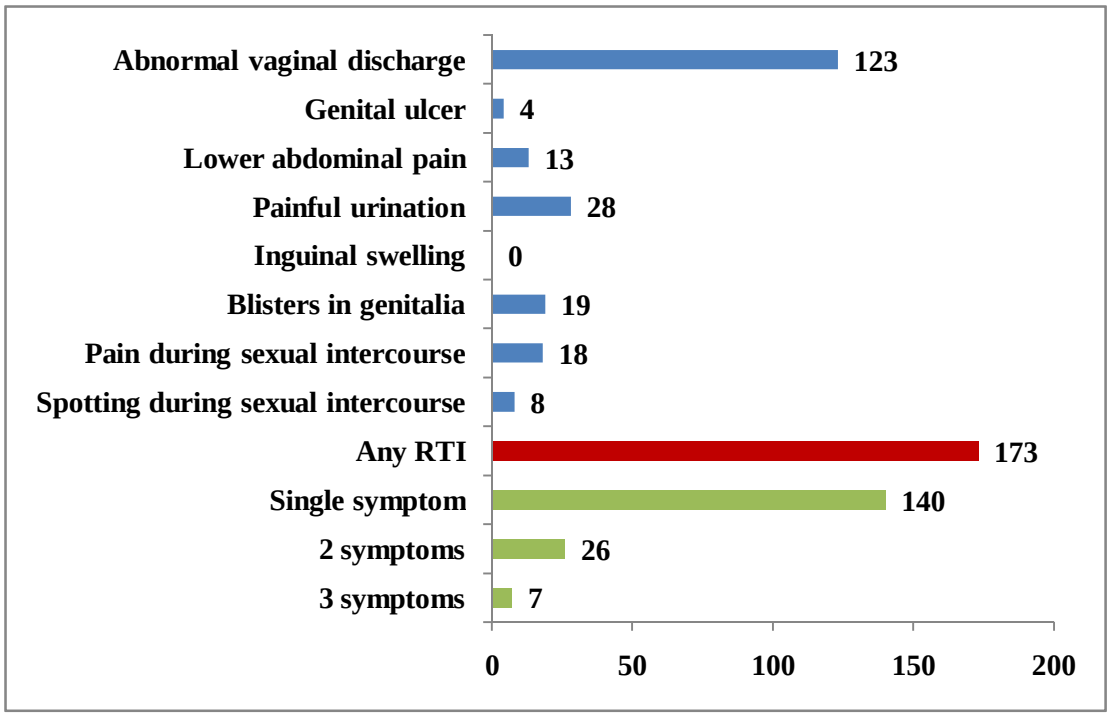
6.2 PREVALENCE OF PERCEIVED SYMPTOMS OF RTI: (N=520)

Figure 3: Prevalence of perceived symptoms of RTI/STI:



173 women (33.3%) reported symptoms of RTI/STI.

Figure 4: Prevalence of various symptoms of RTI/STI among the study population:



Among the total of 520 women, 173 women reported any one symptom of RTI. The prevalence of RTI as measured by this study was 33.3% with a 95% Confidence interval of 33.3 $\pm$ 3.402 %. (29.9% to 36.7%). The total number of RTIs reported were 213 (40.7%). 140 (26.9%) women reported only one symptom of RTI. 26 (5%) reported 2 symptoms and 7 (1.3%) reported 3 symptoms. Abnormal vaginal discharge was the commonest symptom reported (23.7%) followed by painful urination (28; 5.4%). None of the participants reported inguinal swelling.

6.3 OBSTETRIC HISTORY

Table 6: Distribution of study population based on number of conceptions and age at first conception:

Number of conceptions	Number (n=520)	Percentage (%)
None	52	10
≤ 2 conceptions	352	67.7
More than 2 conceptions	116	22.3
Age at first conception	**Number (n=468)**	**Percentage (%)**
< 18 years	24	5.1
18 years and above	444	94.9

Among the 520 participants, 52 women (10%) had never conceived. Of the remaining 468 women, 352 women (67.7%) have had ≤ 2 conceptions and 116 women have had > 2 conceptions.

Among the 468 women who had ever conceived, 24 women (5.1%) have had their first conception at < 18 years of age, while the remaining 444 (94.9%) women were aged 18 years and above at their first conception.

Figure 5: Distribution of the study population based on number and type of live births: (N=468)

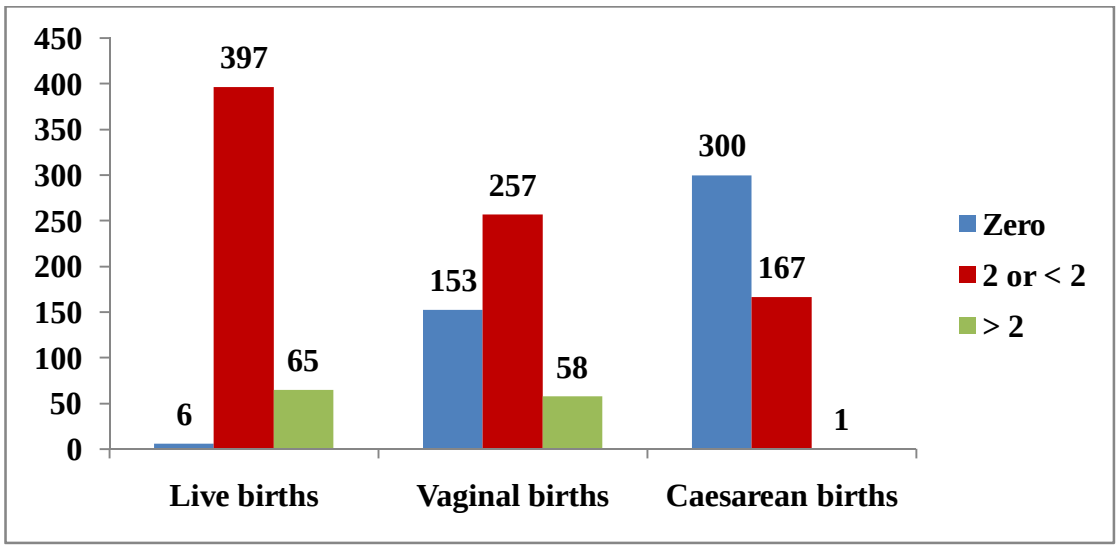


Figure 5 shows that among the 468 women who had ever conceived, 397 (84.8%) had ≤ 2 live births and 65 (13.9%) had > 2 live births. 6 women (1.3%) never had live births. 257 women (54.9%) have had ≤ 2 vaginal births and 58 women (12.4%) have had > 2 vaginal births. 153 women (32.7%) had never had any vaginal births. 300 women (64.1%) had never had caesarean births, 167 women (35.7%) have had ≤ 2 caesarean births and only 1(0.2%) woman had > 2 caesarean births.

Figure 6: Distribution of study population based on experience of abortions:

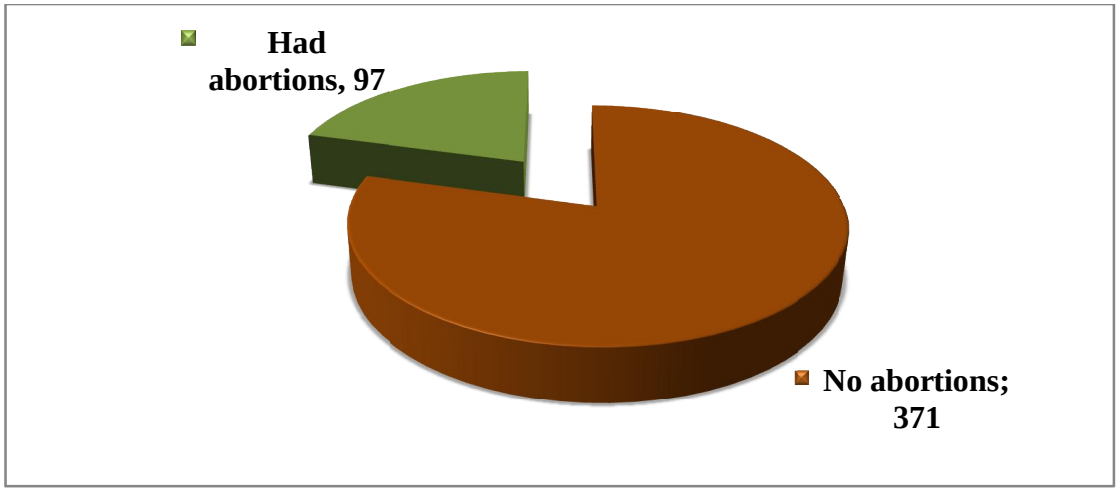


Table 7: Distribution of study population based on type of abortions:

Type of abortions	Number (N=468)	Percentage (%)
No abortions	371	79.3
Spontaneous abortions	72	15.4
Induced abortions	23	4.9
Both	2	0.4

As shown by the Figure 6 and Table 7, among the 468 women who had ever conceived, 371 women (79.3%) have not had any abortions, while the other 97 women (20.7%) have undergone abortions. 72 women (15.4%) have experienced spontaneous abortions, 23 women (4.9%) have undergone induced abortions and 2 women (0.4%) have undergone both.

6.4 CONTRACEPTIVE PRACTICES

Table 8: Distribution of study population based on history of Permanent sterilisation

Permanent sterilisation	Number (n=520)	Percentage (%)
No permanent sterilisation	304	58.5
Had permanent sterilisation	216	41.5

Among the study participants, 216 women (41.5%) have undergone permanent sterilisation, while the remaining 304 women (58.5%) have not undergone sterilisation.

Table 9: Ever usage and current usage of modern spacing methods

Modern spacing methods ever used (before 1 year)	Number (n=520)	Percentage (%)
None	369	71.0
Oral contraceptive pills	10	1.9
Copper T	121	23.3
Condoms	20	3.8
Modern spacing methods currently using	**Number (n=520)**	**Percentage (%)**
None	404	77.7
Oral contraceptive pills	11	2.1
Copper T	44	8.5
Condoms	61	11.7

Ever usage of modern spacing methods (before 1 year): 369 women (71%) never used any of the modern spacing methods in the past. 121 women (23.3%) have used Copper T, 10 women (1.9%) have used Oral Contraceptive pills (OCPs) and the husbands of 20 women (3.8%) have used condoms.

Current usage of contraceptives: 404 women (77.7%) are not using any of the modern spacing methods now. 11 women (2.1%) are using OCPs, 44 women (8.5%) are using Copper T and the husbands of 61 women (11.7%) use Condoms.

Figure 7: Current contraceptive status of the study population

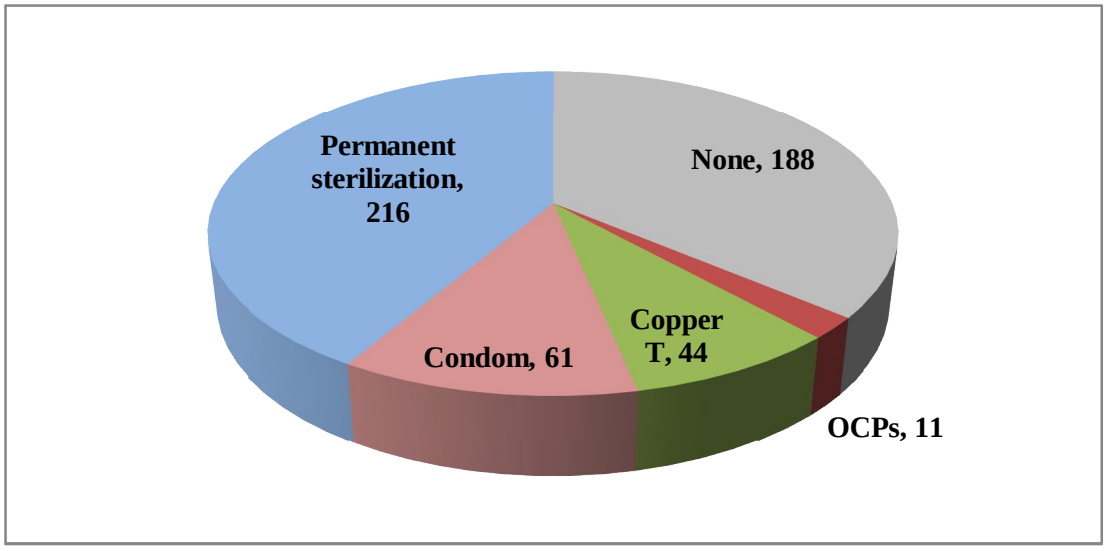
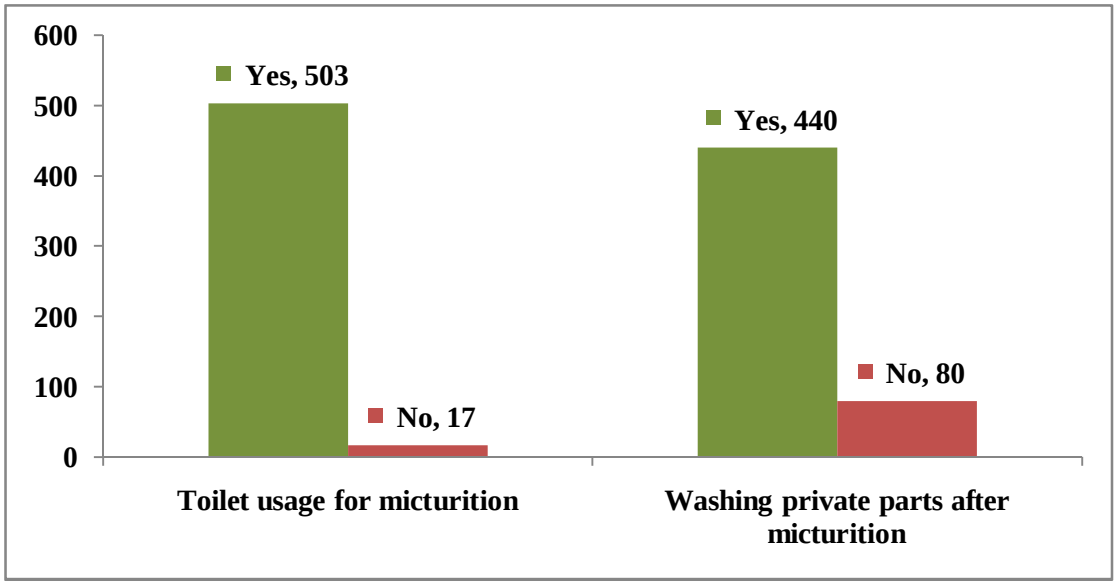


Figure 7 summarises the current contraceptive status of the study population. 188 women (36.2%) are not using any contraceptive method. 216 women (41.5%) have undergone permanent sterilisation. 11 women (2.1%) are using OCPs, 44 women (8.5%) are using Copper T and the husbands of 61 women (11.7%) use Condoms.

6.5 PERSONAL AND MENSTRUAL HYGIENE PRACTICES

Figure 8: Personal hygiene practices among the study population



As shown in the above Figure 8, 503 women (96.7%) use toilets for urination purposes, while 17 women (3.3%) do not use toilets for urination purposes. 440 women (84.6%) have the habit of washing their private parts after urination, whereas 80 women (15.4%) do not wash their private parts after urination.

Table 10: Type of napkin used during menstrual periods

Type of napkin used	Number (n=520)	Percentage (%)
Cloth or homemade pad	136	26.2
Commercial sanitary napkin	333	64.0
Both	51	9.8

Among the study participants, 136 (26.2%) women use cloth or homemade pads during their menstrual periods, 333 (64%) women use commercial sanitary napkins, and 51 (9.8%) women use both.

Table 11: Reuse habits of study participants:

Reuse of napkin	**Number (n=187)**	**Percentage (%)**
Yes	177	94.7
No	10	5.3
Washing before reuse	**Number (n=177)**	
Soap and water only	128	72.3
Soap and water with disinfectant	49	27.7
Drying before reuse	**Number (n=177)**	
Sunlight	70	39.5
Shade	107	60.5

Among the 187 (136+51) who use cloth or homemade napkins or both cloth/ homemade napkins and commercial sanitary napkins, 177 (94.7%) reuse the napkins after washing, while 10 (5.3%) women do not reuse napkins.

Among the 177 women who reuse napkins, 128 (72.3%) wash the napkins with soap and water and 49 (27.7%) women use a disinfectant along with soap and water for washing. 70 (39.5%) women dry the cloth or napkins in sunlight, while most of them, 107 (60.5%) dry them only in shade.

6.6 STATISTICAL ANALYSIS OF VARIABLES

Table 12: Participant age group and RTI

Age group	RTI	No RTI	Total
18-20 years	16 (57.1%)	12 (42.9%)	28
21-25 years	49 (30.2%)	113 (69.8%)	162
26-30 years	43 (31.2%)	95 (68.8%)	138
31-35 years	27 (31.8%)	58 (68.2%)	85
36-40 years	26 (48.1%)	28 (51.9%)	54
41-45 years	12 (22.6%)	41 (77.4%)	53
Total	173	347	520

$\chi^2_{(0.05)}(5) = 16.299$ (P=0.006) (SS)

Among the study participants, the prevalence of RTI was found to be more common among women belonging to 18 to 20 years age group, followed by those in 36 to 40 years age group. The difference was found to be significant.

Table 13: Marital Status and RTI:

Marital status	RTI	No RTI	Total
Living with husband	160 (32.7%)	329 (67.3%)	489
Widowed/ separated/ divorced	13 (41.9%)	18 (58.1%)	31
Total	173	347	520

$\chi^2_{(0.05)}(1) = 1.115$ (P=0.291) (NS)

There was no significant association between the marital status of participants and the prevalence of RTI.

Table 14: Age at marriage and RTI

Age group	RTI	No RTI	Total
Less than 18 years	20 (32.3%)	42 (67.7%)	62
18 and > 18 years	153 (33.4%)	305 (66.6%)	458
Total	173	347	520

$\chi^2_{(0.05)}(1) = 0.032$ (P=0.857) (NS)

No significant association was observed between age at marriage and RTI.

Table 15: Duration of marriage and RTI

Duration of marriage	RTI	No RTI	Total
Less than 1 year	14 (56%)	11 (44%)	25
1 to 5 years	68 (29.2%)	165 (70.8%)	233
6 to 10 years	37 (38.1%)	60 (61.9%)	97
More than 10 years	54 (32.7%)	111 (67.3%)	165
Total	173	347	520

$\chi^2_{(0.05)}(3) = 8.360$ (P=0.035) (SS)

This table shows that the prevalence of RTI was found to be highest among women married for less than 1 year (56%) and this association was found to be significant.

Table 16: Religion and RTI

Religion	RTI	No RTI	Total
Hindu	148 (33.5%)	294 (66.5%)	442
Muslim	13 (37.1%)	22 (62.9%)	35
Christian	12 (27.9%)	31 (72.1%)	43
Total	173	347	520

$\chi^2_{(0.05)}(2) = 0.803$ (P=0.669) (NS)

Table 16 shows that the prevalence of RTI to be highest among Muslims (37.1%), followed by Hindus (33.5%) and Christians (27.9%). But the difference was not significant.

Table 17: Participant education status and RTI

Education status	RTI	No RTI	Total
Illiterate	15 (35.7%)	27 (64.3%)	42
Primary school	26 (32.1%)	55 (67.9%)	81
High school	75 (35.9%)	134 (64.1%)	209
Higher Secondary School	30 (33.7%)	59 (66.3%)	89
College	27 (27.3%)	72 (72.7%)	99
Total	173	347	520

$\chi^2_{(0.05)}(4) = 2.418$ (P=0.659) (NS)

There was no significant association between the educational status of participants and RTI.

Table 18: Occupational status of participants and RTI

Occupational status	RTI	No RTI	Total
Working	29 (29%)	71 (71%)	100
Not working	144 (34.3%)	276 (65.7%)	420
Total	173	347	520

$\chi^2_{(0.05)}(1) = 1.016$ (P=0.3134) (NS)

Occupational status of participants was not significantly associated with prevalence of RTI.

Table 19: Type of family and RTI

Type of family	RTI	No RTI	Total
Nuclear family	119 (33.8%)	233 (66.2%)	352
Joint/Extended nuclear family	54 (32.1%)	114 (67.9%)	168
Total	173	347	520

$\chi^2_{(0.05)}$ (1) = 0.142 (P=0.706) (NS)

There was no statistically significant association between the type of family and RTI.

Table 20: Socioeconomic status (SES) and RTI

Per capita income	SES	RTI	No RTI	Total
Rs. 2830 and above	Class I	41 (35%)	76 (65%)	117
Rs. 1415 – 2829	Class II	54 (29.5%)	129 (70.5%)	183
Rs. 850 – 1414	Class III	48 (34.8%)	90 (65.2%)	138
Rs. 425 – 849	Class IV	27 (34.6%)	51 (65.4%)	78
< Rs. 425	Class V	3 (75%)	1 (25%)	4
	Total	173	347	520

Fisher's Exact test, P = 0.3303 (NS)

The prevalence of RTI was more among the women of Class V. But this relationship was not significant.

Table 21: Number of conceptions and RTI

Number of conceptions	RTI	No RTI	Total
None	22 (42.3%)	30 (57.7%)	52
2 and < 2 conceptions	114 (32.4%)	238 (67.6%)	352
> 2 conceptions	37 (31.9%)	79 (68.1%)	116
Total	173	347	520

$\chi^2_{(0.05)}(2) = 2.136$ (P=0.344) (NS)

No significant association was observed between the number of conceptions and the prevalence of RTI.

Table 22: Age at first conception and RTI

Age at first conception	RTI	No RTI	Total
< 18 years	7 (29.2%)	17 (70.8%)	24
18 years and above	144 (32.4%)	300 (67.6%)	444
Total	151	317	468

$\chi^2_{(0.05)}(1) = 0.111$ (P=0.739) (NS)

Age at first conception (< 18 years Vs ≥ 18 years) was not significantly associated with prevalence of RTI.

Table 23: Number of live births and RTI

Number of live births	RTI	No RTI	Total
No live births	3 (50%)	3 (50%)	6
1 or 2 live births	125 (31.5%)	272 (68.5%)	397
> 2 live births	23 (35.4%)	42 (64.6%)	65
Total	151	317	468

Fisher's Exact test, P = 0.4742 (NS)

The prevalence of RTI does not show any significant association with the number of live births.

Table 24: Number of abortions and RTI

No. of abortions	RTI	No RTI	Total
No abortions	119 (32.1%)	252 (67.9%)	371
1 or more abortions	54 (36.2%)	95 (63.8%)	149
Total	173	347	520

$\chi^2_{(0.05)}(1) = 0.831$ (P=0.362) (NS)

Table 24 shows that women who have had one or more abortions were found to have a higher prevalence of RTI (36.2%) compared to those women who never had any abortions (32.1%). But this difference was not statistically significant.

Table 25: Permanent sterilisation in females and RTI

Permanent sterilisation	RTI	No RTI	Total
Not had permanent sterilisation	110 (36.2%)	194 (63.8%)	304
Had permanent sterilisation	63 (29.2%)	153 (70.8%)	216
Total	173	347	520

$\chi^2_{(0.05)}(1) = 2.801$ (P=0.094) (NS)

This table shows that women who had permanent sterilisation did not experience any significant difference in the prevalence of RTI compared to women who had not undergone permanent sterilisation.

Table 26: Modern spacing methods ever used and RTI

Modern spacing method ever used	RTI	No RTI	Total
None	96 (26%)	273 (74%)	369
Oral contraceptive pills	2 (20%)	8 (80%)	10
Copper T	73 (60.3%)	48 (39.7%)	121
Condoms	2 (10%)	18 (90%)	20
Total	173	347	520

Fisher's Exact test, P = 0.0000 (SS)

Past history of contraceptive use (before 1 year) among the study participants showed that the prevalence of RTI was highest among Copper T users (60.3%) and lowest among those participants whose husbands used condoms (10%). This association was found to be statistically significant.

Table 27: Modern spacing methods used currently and RTI

Spacing method currently using	RTI	No RTI	Total
None	122 (30.2%)	282 (69.8%)	404
OCPs	5 (45.5%)	6 (54.5%)	11
Copper T	37 (84.1%)	7 (15.9%)	44
Condoms	9 (14.8%)	52 (85.2%)	61
Total	173	347	520

$\chi^2_{(0.05)}(3) = 63.061$ (P=0.000) (SS)

Among the current usage of modern spacing methods by the study participants, the prevalence of RTI was found to be highest among Copper T users (84.1%) and lowest among condom users (14.8%). This difference was found to be statistically significant.

Table 28: Current contraceptive status and RTI

Current contraceptive status	RTI	No RTI	Total
None	59 (31.4%)	129 (68.6%)	188
Oral contraceptive pills	5 (45.5%)	6 (54.5%)	11
Copper T	37 (84.1%)	7 (15.9%)	44
Condom	9 (14.8%)	52 (85.2%)	61
Permanent sterilisation	63 (29.2%)	153 (70.8%)	216
Total	173	347	520

$\chi^2_{(0.05)}$ (4) = 63.283 (P=0.000) (SS)

Table 28 shows that the prevalence of RTI was lowest among Condom users (14.8%) and highest among Copper T users (84.1%). This association was statistically significant.

Table 29: Toilet usage for urination and RTI

Toilet usage for urination	RTI	No RTI	Total
No	12 (70.6%)	5 (29.4%)	17
Yes	161 (32.0%)	342 (68.0%)	503
Total	173	347	520

$\chi^2_{(0.05)}$ (1) = 11.025 (P=0.001) (SS)

The association between the usage of toilet for urination purposes and prevalence of RTI was found to be statistically significant.

Table 30: Washing private parts after urination and RTI

Washing private parts after micturition	RTI	NO RTI	TOTAL
No	77 (96.3%)	3 (3.8%)	80
Yes	96 (21.8%)	344 (78.2%)	440
Total	173	347	520

Fisher's Exact test, P=0.000 (SS)

The association between the habit of washing private parts after urination and RTI was statistically significant.

Table 31: Type of napkin used during menstruation and RTI

Type of napkin	RTI	No RTI	Total
Cloth or homemade pad	59 (43.4%)	77 (56.6%)	136
Commercial sanitary napkin	98 (29.4%)	235 (70.6%)	333
Both	16 (31.4%)	35 (68.6%)	51
Total	173	347	520

$\chi^2_{(0.05)}$ (2) = 8.559 (P=0.014) (SS)

The prevalence of RTI was higher among participants using cloth or homemade pads and both cloth/ homemade pads compared to those using commercial sanitary napkins. This finding was statistically significant.

Table 32: Reuse of napkins and RTI

Reuse of napkin	RTI	No RTI	Total
Yes	72 (40.7%)	105 (59.3%)	177
No	3 (27.3%)	8 (72.7%)	11
Total	75	113	188

Fisher's Exact test, P=0.530 (NS)

The prevalence of RTI does not show any significant association with the habit of reusing napkins.

Table 33: Washing practices of napkins before reuse and RTI

Method of washing before reuse	RTI	No RTI	Total
Soap and water only	65 (50.8%)	63 (49.2%)	128
Soap and water with disinfectant	7 (14.3%)	42 (85.7%)	49
Total	72	105	177

$\chi^2_{(0.05)}(1) = 19.559$ (P=0.000) (SS)

The prevalence of RTI was higher among those participants who washed the cloth or homemade napkins with soap and water (50.8%) compared to those who also used a disinfectant (14.3%) and this difference was statistically significant.

Table 34: Drying practices before reuse and RTI

Method of drying before reuse	RTI	No RTI	Total
Shade	57 (53.3%)	50 (46.7%)	107
Sunlight	15 (21.4%)	55 (78.6%)	70
Total	72	105	177

$\chi^2_{(0.05)}(1) = 17.781$ (P=0.000) (SS)

Among the study participants who reuse their napkins, the prevalence of RTI was higher among those who dried the napkins in shade (53.3%) compared to those who dried under sunlight (21.4%). This association was statistically significant.

DISCUSSION

7. DISCUSSION

This study was carried out in Karanai Puducheri, a rural area of Kancheepuram District in Tamilnadu to find out the prevalence of Reproductive tract infections and their association with selected risk factors like Sociodemographic characteristics, Obstetric history, Contraceptive usage and Personal and Menstrual hygiene practices among married women in the age group of 18 to 45 years.

7.1 Prevalence of RTI:

Out of 520 women who participated in the study 173 women reported any one of the symptoms of RTI/STI. The prevalence of RTIs as measured by the symptoms reported was 33.3% with 95% confidence interval 33.3 $\pm$ 3.4 %. This prevalence is lower than the 95% confidence limits of the prevalence reported in Veerapandi Panchayat (Kannan C et al.)[76]. Singh S et al. has also reported a higher prevalence in rural Maharashtra (46%)[41]. This lower prevalence might be due to the semi-urban nature of the study area, which is close to Chennai and widespread use of syndromic approach. But it is still higher than the prevalence of RTI reported in rural areas by DLHS 3 (2007-08)[6] which is 19.6%. Vaginal discharge was the most commonly reported symptom (123 women, 23.7%) followed by dysuria which was reported by 28 women (5.4%). Vaginal discharge was the commonest symptom reported in other studies in rural areas by Patel et al.[43], Samanta A et al. (West Bengal)[63], Kosambiya et al. (Surat)[58] and Acharya A et al. (Haryana).

7.2 Sociodemographic characteristics and RTI:

The prevalence of RTI/STI symptoms was highest in the age group 18 to 20 years (57.1%) followed by 36 to 40 years (48.1%) and this pattern showed a

significant association (P=0.006). But Sharma et al.[62] have reported a maximum prevalence in 25 to 34 years age group and this association was statistically significant. Similar association has also been reported by Kosambiya et al. in Surat[58]. Rathore et al[60] reported an increase in prevalence with increase in age. The difference in this study could be attributed to the composition of study groups (only 5.4% in 18-20 years group) and biological factors and lack of awareness among women aged 36 to 40 years.

The prevalence of RTI did not show any significant association with age at marriage (less than 18 years Vs 18 years and above). But a study based on NFHS 2 (1998-99) data showed a higher prevalence of RTI in those married before 15 years compared to those who married after 19 years. In this study the proportion of women who were married before 18 years was less (11.9%).

There was a statistically significant association between duration of marriage and the prevalence of RTI with women married for less than 1 year showing highest prevalence (56%). This might be due to the non use of barrier methods in early years of marriage.

7.3 Obstetric history and RTI:

The prevalence of RTI did not show any significant association with number of conceptions and live births. Kumar et al. (1997-1998)[59] and Rathore et al.[60] reported a significant association between RTIs and the number of conceptions and live births. The finding of a lack of association between RTI and number of conceptions and live births could be attributed to improved Reproductive health care which is available now. The proportion of women who had > 2 live births was also low (13.9%).

This study did not show any significant association between the prevalence of RTI and number of abortions (P=0.410), though the number of abortions was found to have significant association with RTI as reported by NFHS 2 data, Agrawal S et al.. The difference in this study could possibly be due to the better and safe abortion[64] services available, the study are being close to Chennai.

7.4 Contraceptive practices and RTI:

The method of contraception used in the past (before 1 year) had a significant association with prevalence of RTI (P=0.000). The prevalence was lowest among those who used condoms, highest in those who used Copper T, followed by those who used none of the methods. This shows that condom might have had a protective role in the prevention of RTI and STI.

Similar association was also found with the current contraceptive status and prevalence of RTI. The prevalence of RTI among condom users was the lowest (14.8%). It was highest among Copper T users (84.1%). Kumar S et al[59]., Rathore M et al.[60] in rural Rajasthan, Sharma S et al.[62] in West Bengal, Ravindran TKS et al.[45] in Dharmapuri district in Tamilnadu have reported similar findings.

These findings suggest a definite protective role for male condoms in prevention of STIs. The increased prevalence in women using Copper T could be due to the poor follow up care after insertion.

7.5 Personal and Menstrual Hygiene practices and RTI:

Assessing the association between personal hygiene and RTI, toilet usage for urination purposes and washing of private parts after urination were the two variables taken into consideration. The prevalence of RTI was lower among women who use toilets for urination and those who wash their private parts after urination. Low levels

of personal hygiene was found to be associated with RTIs in studies by Riyami AL et al.[28] among Omani women, Yang LR et al.[34] in rural China and Singh S et al.[75] in rural Dehradun.

Analysing the type of napkin used during menstrual periods and RTI symptoms, the association was significant. The prevalence of RTI was higher among women who used cloth or homemade pads (43.4%), followed by those who used both cloth/ homemade pads and commercial sanitary napkins (31.4%). Further analysis also showed that the prevalence of RTI was higher among women who reuse napkins, though the association was not significant. Women who use only soap and water for washing the napkins to be reused were found to have a higher prevalence (50.8%) than those who also use a disinfectant with soap (14.3%). This association was found to be significant. Analysing the drying practices of napkins washed for reuse, women who dry the napkins under sunlight were found to have significantly lesser prevalence (21.4%) of RTI symptoms compared to those who dried the napkins under shade (53.3%). Similar association has also been reported by Riyami et al.[28], Yang LR et al.[34] and Singh S et al.[75] This association suggests the role of proper menstrual hygiene practices in prevention of RTIs.

This study shows that RTIs with a prevalence of 33.3% as measured by symptoms continue to be a significant problem in rural areas in spite of the various measures adopted by the Government to reduce the transmission of RTIs/STIs. Age of the participant, Duration of marriage, past and current contraceptive usage practices, personal and menstrual hygiene practices were found to be significantly associated with symptoms of RTIs. These factors are amenable to change by health education and counselling and this study stresses the need for awareness programmes and health education among women.

SUMMARY

8. SUMMARY

This was a Community-based, Cross-sectional study carried out in a rural population (Karanai Puducheri village Panchayat) of Kancheepuram District in Tamil Nadu to find out the prevalence of Reproductive tract infections among married women in the age group of 18 to 45 years and to find out the association of RTIs with Sociodemographic characteristics, Obstetric history, Contraceptive usage practices, Personal and Menstrual hygiene practices.

This study used a 3 stage sampling method and Karanai Puducheri Village Panchayat was chosen as the study area. A total of 520 women participated in the study. A semi-structured questionnaire in Tamil was administered to the participants after informed consent.

The prevalence of RTI among women in the age group 18 to 45 years in Karanai Puducheri Village Panchayat was 33.3% (95% Confidence interval 33.3 $\pm$ 3.4%). Vaginal discharge was the commonest symptom reported (23.7%) followed by pain during urination (5.4%). 26.9% of women reported a single symptom, 5% reported 2 symptoms and 1.3% reported 3 symptoms.

On analysis of the factors with RTI, the prevalence of RTIs was found to be significantly associated with age of the participant (highest prevalence in women aged 18 to 20 years) and duration of marriage (highest prevalence among those married for less than 1 year). Analysing the contraceptive usage practices of the participants, past and current usage pattern of contraceptive practices (lowest among those whose partners use male condoms and highest among Copper T users) was significantly associated with RTIs. Personal hygiene practices (those women who do not use toilet for urination and those who do not wash their private parts after

urination were found to have higher prevalence) and menstrual hygiene practices (those who use cloth and homemade napkins were found to have higher prevalence than those who use commercial sanitary napkins; those who use only soap and water to wash the napkins to be reused were found to have higher prevalence than those who use a disinfectant along with soap; the prevalence was lower among those who dry the napkins under sunlight compared to those who dry under shade) were also significantly associated with RTI.

The high prevalence and association with modifiable factors like contraceptive usage, personal and menstrual hygiene practices of RTIs suggest scope for intervention through health education programmes among women in preventing transmission of RTIs.

LIMITATIONS

9. LIMITATIONS

1. The study area (Karanai Puducheri in Kanchipuram district) is close to Chennai. So the effect of urbanisation could have influenced their reproductive health behaviour.

2. Since a period of recall of symptoms was 1 year and those of the obstetric history and contraceptive practices will be much longer, there is a possibility of recall bias.

3. Though the Syndromic approach was used, only the symptoms and experience of symptoms in the past 1 year was taken into account. They were not followed by detailed clinical or laboratory examination. But the response rate was high.

4. Details regarding place of delivery and attendant during delivery could not be collected in detail among participants due to difficulty in recall, which would have been useful in correlating obstetric history and RTIs.

RECOMMENDATIONS

10. RECOMMENDATIONS

1. RTI symptoms were more common among the age group 18 to 20 years. Adolescent girls should be educated regarding personal and menstrual hygiene practices.

2. Postponing the age of marriage to early 20's and awareness among young married women regarding contraceptive usage and personal and menstrual hygiene practices should be promoted.

3. IUD insertion should be associated with periodic follow up care.

4. Condoms should be promoted not only as a barrier contraceptive but also to protect against RTIs/STIs. Those couples who have undergone permanent sterilization should be encouraged to use condoms for protection against RTIs/STIs.

5. Community based active surveillance programmes are needed to find out women suffering from RTIs.

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ANNEXURES

ANNEXURE-1

INFORMATION SHEET

Title of the dissertation:

A Cross – sectional study on Prevalence of Reproductive Tract Infections based on Syndromic approach among married women aged 18 to 45 years in a rural area of Kancheepuram district, Tamil Nadu, 2011

Reproductive tract infections (RTI's) including Sexually transmitted infections (STI's) are a common and serious health problem worldwide. The most long term sequelae arise in women: pelvic inflammatory disease, cervical cancer, infertility, spontaneous abortion and ectopic pregnancy, the latter of which may lead to maternal death. The presence of an STI increases the risk of acquiring and transmitting HIV infection by three to five times.

This study is an attempt to identify the magnitude of RTI's and associated risk factors among married women of reproductive age group in a rural area of Tamilnadu.

We request, you participate in this study.

The privacy of the patients in the research will be maintained throughout the study. In the event of any publication or presentation resulting from the research, no personally identifiable information will be shared.

Taking part in this study is voluntary. You are free to decide whether to participate in this study or to withdraw at any time; your decision will not result in any loss of benefits to which you are otherwise entitled.

The results of the special study may be intimated to you at the end of the study period or during the study if anything is found abnormal which may aid in the management or treatment.

INFORMED CONSENT FORM

Title of the dissertation:

A Cross – sectional study on Prevalence of Reproductive Tract Infections based on Syndromic approach among married women aged 18 to 45 years in a rural area of Kancheepuram district, Tamil Nadu, 2011

Name of the participant: Participant ID: Age :

(1) I have been explained in detail about the study and its procedure. I confirm that I had completely understood the study and have had the opportunity to ask questions.

(2) I understand that my participation in the study is voluntary and that I am free to withdraw at any time, without giving any reason, without my medical care or legal rights being affected.

(3) I understand that the principal investigator, others working on the investigator's behalf, the Ethics Committee and the regulatory authorities will not need my permission to look at my health records both in respect of the current study and any further research that may be conducted in relation to it, even if I withdraw from the trial. I agree to this access. However I understand that my identity will not be revealed in any information released to third parties or published.

(4) I agree not to restrict the use of any data or results that arise from this study provided such a use is only for scientific purpose(s).

(5) I agree to take part in the above study.

Signature of investigator Signature of participant

_____ _____

Date:

தகவல் தாள்

காஞ்சிபுரம் மாவட்டம் கிராமப்புற பகுதியைச் சார்ந்த 18 முதல் 45 வயதிற்குட்பட்ட திருமணமான பெண்களிடையே நிலவும் இனப்பெருக்கப்பாதை தொற்றுநோய்கள் குறித்த ஆய்வு

காஞ்சிபுரம் பகுதியில் வாழும் 18 முதல் 45 வயதிற்குட்பட்ட பெண்களிடையே நிலவும் இனப்பெருக்கப்பாதை தொற்றுநோய்களையும் அதன் காரணிகளையும் கண்டறிதலே இந்த ஆய்வின் நோக்கமாகும்.

வளர்ந்துவரும் நாடுகளில் இனப்பெருக்கப்பாதை தொற்றுநோய்களின் பாதிப்பு அதிகமுள்ளது. பெண்களிடையே அதனால் மலட்டுத்தன்மை, கருப்பை கழுத்து புற்றுநோய், மன அழுத்தம் போன்ற பல உடல்நல விளைவுகள் ஏற்பட வாய்ப்புண்டு.

நீங்கள் இந்த ஆராய்ச்சியில் பங்கேற்று இதில் கேட்கப்படும் கேள்விகளுக்கு பதில் அளிக்க விரும்புகின்றோம்.

இந்த ஆராய்ச்சியின் முடிவுகளை அல்லது கருத்துக்களை வெளியிடும்போதோ அல்லது ஆராய்ச்சியின் போதோ தங்களது பெயரையோ, அடையாளங்களையோ வெளியிடமாட்டோம் என்பதையும் தெரிவித்துக் கொள்கிறோம்.

இந்த ஆராய்ச்சியில் பங்கேற்பது தங்களுடைய விருப்பத்தின்பேரில் தான் இருக்கிறது. மேலும் அவர்கள் எந்நேரமும் இந்த ஆராய்ச்சியிலிருந்து பின்வாங்கலாம் என்பதையும் தெரிவித்துக்கொள்கிறோம்.

இந்த ஆராய்ச்சியின் முடிவுகளை ஆராய்ச்சியின் போது அல்லது ஆராய்ச்சியின் முடிவின்போது தங்களுக்கு அறிவிக்கப்படும் என்பதையும் தெரிவித்துக்கொள்கிறோம்.

ஒப்புதல் படிவம்

காஞ்சிபுரம் மாவட்டம் கிராமப்புற பகுதியைச் சார்ந்த 18 முதல் 45 வயதிற்குட்பட்ட திருமணமான பெண்களிடையே நிலவும் இனப்பெருக்கப்பாதை தொற்றுநோய்கள் குறித்த ஆய்வு

பெயர் : வயது :

ஆராய்ச்சி சேர்க்கை எண் : தேதி :

இந்த ஆராய்ச்சியின் விவரங்களைக் கொண்ட தகவல் தாளைப் பெற்றுக்கொண்டேன்.

இந்த ஆராய்ச்சியின் விவரங்களும் அதன் நோக்கமும் முழுமையாக எனக்கு தெளிவாக விளக்கப்பட்டது.

எனக்கு விளக்கப்பட்ட விஷயங்களை நான் புரிந்துகொண்டு எனது சம்மதத்தை தெரிவிக்கிறேன்.

இந்த ஆராய்ச்சியில் பிறரின் நிர்ப்பந்தமின்றி என் சொந்த விருப்பத்தின்பேரில்தான் பங்கு பெறுகின்றேன். இந்த ஆராய்ச்சியில் இருந்து நான் எந்நேரமும் பின் வாங்கலாம் என்பதையும் அதனால் எந்த பாதிப்பும் ஏற்படாது என்பதையும் நான் புரிந்துகொண்டேன்.

நான் என்னுடைய சுய நினைவுடனும் மற்றும் முழு சுதந்திரத்துடனும் இந்த மருத்துவ ஆராய்ச்சியில் என்னை சேர்த்துக்கொள்ள சம்மதிக்கிறேன்.

ஆராய்ச்சியாளர் மற்றும் அவரைச் சார்ந்தவர்களோ, நெறிமுறைக்குழு உறுப்பினர்களோ நான் இந்த ஆராய்ச்சியில் இருந்து விலகினாலும் என்னுடைய அனுமதியின்றி எனது உடல்நிலை குறித்த தகவல்களை இந்த ஆராய்ச்சிக்கோ இது தொடர்பான வேறு ஆராய்ச்சிகளுக்கோ பயன்படுத்திக்கொள்ள முடியும் என்று புரிந்து கொண்டு சம்மதம் அளிக்கிறேன். ஆனாலும் என்னுடைய அடையாளம் வெளியிடப்படமாட்டாது என்று புரிந்துகொள்கிறேன்.

இந்த ஆராய்ச்சியின் தகவல்களையும் முடிவுகளையும் அறிவியல் நோக்கத்திற்காக பயன்படுத்துவதற்கு நான் அனுமதிக்கிறேன். நான் ஆராய்ச்சியில் பங்குபெற சம்மதிக்கிறேன்.

பங்கேற்பவரின் பெயர் பங்கேற்பவரின் கையொப்பம்
(அல்லது) கட்டைவிரல் ரேகை

ஆய்வாளர் பெயர் ஆய்வாளரின் கையொப்பம்

இடம் தேதி

ANNEXURE-2

QUESTIONNAIRE

Participant ID :
Name of the participant : Age:
Name of the spouse : Age:

A. SOCIODEMOGRAPHIC DETAILS:

1. Marital status:
   (a) currently married
   (b) widowed/ divorced/ separated/ deserted

2. Age at marriage: _____

3. Since how long are you married? _____

4. Religion:
   (a) Hindu (c) Christian
   (b) Muslim (d) Others

5. What is your educational status? _____

6. What is your husband's education? _____

7. Work status:
   (a) self employed (b) daily wages
   (c) monthly salaried (d) not working

8. What type of family is yours?
   (a) nuclear family (b) joint family, extended nuclear/ three generation family

9. How many members are there in your family? _____

10. What is the total monthly income of the family? _____

B. PERCEIVED SYMPTOMS OF RTI:

11. During the past 1 year, did you have any abnormal vaginal discharge?
    Yes / No
    If No, go to Q. No. 12.

If Yes,

(a) Does / Did it wet/stain your underclothes? Yes / No

(b) What is /was the colour of that discharge?
Colourless/ white/ green/ yellowish/ blood-stained/ don't know

(c) What is/was the texture of that discharge?
Sticky mucoid/ frothy/ curdish/ pus-like or purulent/ don't know

(d) What is/was the odour of the discharge?
Foul/ none/ don't know

(e) How long have you been having this problem?
_____ weeks/ _____ months/ _____ years/ do not remember

12. During the past 1 year, did you have any ulcers / boils in and around the genital region?
Yes / No

If No, go to 13. If Yes,

(a) 1. Painful 2. Painless
(b) 1. Vesicles 2. No vesicles
(c) 1. Recurrent 2. Not recurrent
(d) Swelling in the groin 1. Yes 2. No
(e) Duration: _____

13. During the past 1 year did you have any of the following problem?

(a) pain in lower abdomen not related to menses Yes / No
(b) pain during urination/ defaecation Yes / No
(c) swelling in the groin Yes / No
(d) painful blister like lesions in and around vagina Yes / No

<u>Only to currently married women,</u>

(e) pain during sexual intercourse Yes / No
(f) spotting after sexual intercourse Yes / No
(g) Duration: _____

C. OBSTETRIC HISTORY:

14. How many times where you pregnant? _____

15. What was your age when your first child was born? _____

16. What was your age when your last child was born? _____

PREGNANCY ORDER	LIVE BIRTH				STILL BIRTH/ ABORTION		
	AGE	SEX	PLACE	DELIVERY ATTENDANT	SPONTANEOUS/ INDUCED	GESTATIONAL AGE	PLACE

D. CONTRACEPTIVE PRACTICES:

17. Have you or your spouse undergone permanent sterilisation method?
(a)Yes (b) No
If No, go to Q. No. 18, if Yes,
(a) Male sterilisation (b) Female sterilisation

18. What are the contraceptive methods, you have ever used?
_____

19. What is/ are the contraceptive methods you are currently using?
_____

E. PERSONAL AND MENSTRUAL HYGIENE PRACTICES:

20. Do you use toilet for urination purposes? (a)Yes (b)No

21. Do you wash your private parts after urination? (a)Yes (b)No

22. What type of napkin do you usually use during your periods?
(a) cloth/ homemade sanitary pad
(b) commercial sanitary napkin
(c) both
If a or c, go to 23.

23. Do you reuse cloth or homemade pad?
(a) Yes (b) No
If Yes, go to 23, if No go to 25.

24. How do you wash before reusing?
(a) soap and water only (b) soap and water with disinfectant

25. How do you dry the cloth?
(a) sunlight (b) shade

Thank you.

வினாப்பட்டி

பங்கேற்பாளர் பதிவு எண் :

பெயர் : வயது :

கணவரின் பெயர் : வயது :

பகுதி–I: சமூக நிலை

1) திருமண நிலை
   அ) கணவருடன் வசிப்பவர்
   ஆ) விதவை/ விவாகரத்தானவர்/ கணவரைப் பிரிந்தவர்/ கணவரால் கைவிடப்பட்டவர்
2) திருமணத்தின்போது தங்களின் வயது என்ன? .....
3) தங்களுக்கு திருமணமாகி எத்தனை வருடங்கள் ஆகின்றன? .....
4) தாங்கள் எந்த மதத்தைச் சார்ந்தவர்?
   அ) இந்து
   ஆ) முஸ்லிம்
   இ) கிறிஸ்துவர்
   ஈ) மற்றவை
5) தங்களின் கல்வித் தகுதி என்ன? .....
6) தங்கள் கணவரின் கல்வித் தகுதி என்ன? .....
7) பணி நிலை விவரம்
   அ) சுய தொழில் ஆ) தினக்கூலி
   இ) மாதச் சம்பளம் ஈ) பணி புரியவில்லை
8) தங்கள் குடும்பம் எந்த வகையைச் சார்ந்தது?
   அ) தனிக்குடும்பம்
   ஆ) கூட்டுக்குடும்பம்
9) தங்கள் குடும்பத்தில் உள்ள மொத்த நபர்களின் எண்ணிக்கை? .....
10) தங்கள் குடும்பத்தின் மொத்த மாத வருமானம் என்ன? .....

பகுதி–II: இனப்பெருக்க பாதை தொற்று நோய்களின் அறிகுறிகள்

11) கடந்த ஒரு வருடத்தில் தங்களுக்கு எப்பொழுதாவது பிறப்புறுப்பில் இருந்து நீர் கசிவு இருந்துள்ளதா? ஆம்/இல்லை

    இல்லை– எனில் கே.எண்.12

    ஆம்– எனில்

    அ) அதனால் தங்கள் உள்ளாடை நனைந்தோ/ கறைபடிந்தோ/ அவதிப்பட்டீர்களா? ஆம்/இல்லை
    ஆ) நீர் கசிவின் நிறம் என்ன?
    நிறமில்லை/ வெள்ளை/ பச்சை/ மஞ்சள்/ இரத்தம் கலந்த நிறம்/ தெரியவில்லை.
    இ) அந்த நீரின் தன்மை என்ன?
    சளித்தன்மை/ நுரைத்தன்மை/ தயிர்போல் திரிந்து/ சீழ் தன்மை/ தெரியவில்லை
    ஈ) அந்த நீர்க்கசிவில் துர்நாற்றம் இருந்ததா?
    ஆம்/ இல்லை/ தெரியவில்லை
    உ) தாங்கள் எத்தனை நாட்களாக இந்த பிரச்சனையினால் அவதிப்பட்டீர்கள்/ அவதிப்படுகிறீர்கள்? .....

12) கடந்த ஒரு வருடத்தில் தாங்கள் எப்பொழுதாவது பிறப்புறுப்பிலும் அதைச் சுற்றியும் புண்கள் வந்து அவதிப்பட்டீர்களா? ஆம்/இல்லை

இல்லை எனில் கே.எண்.13

அ) வலி இருந்தது/ வலி இல்லை

ஆ) நீர் கொப்புளங்கள் இருந்தது/ நீர் கொப்புளங்கள் இல்லை

இ) ஒரு முறை/ பல முறை

ஈ) இடையில் நெரிக்கட்டிகள்: ஆம்/ இல்லை

உ) எவ்வளவு காலமாக அவதிப்பட்டீர்கள்/ அவதிப்படுகிறீர்கள்? .....

13) கடந்த ஒரு வருடத்தில், தாங்கள் கீழ்கண்ட பிற அறிகுறிகளினால் அவதிப்பட்டிருக்கிறீர்களா?

அ) அடி வயிற்றில் வலி (மாதவிலக்கு அல்லாத காலங்களில்): ஆம்/இல்லை

ஆ) சிறுநீர்/ மலம் கழிக்கும்போது வலி/ எரிச்சல்: ஆம்/இல்லை

இ) இடைவெளியில் நெரிக்கட்டிகள்: ஆம்/ இல்லை

ஈ) பிறப்புறுப்பிலும் அதைச் சுற்றியும் நமைச்சல்/ எரிச்சல்/ அரிப்பு: ஆம்/ இல்லை

பகுதி–3: கர்ப்பகால விவரங்கள்

14) தாங்கள் எத்தனை முறை கர்ப்பம் அடைந்துள்ளீர்கள்? .....

15) தங்களுக்கு முதல் குழந்தை பிறந்தபோது தங்கள் வயது என்ன? .....

16) தங்களுக்கு கடைசி குழந்தை பிறந்தபோது தங்கள் வயது என்ன? .....

கர்ப்பங்கள்	பிறந்த குழந்தையின் விவரங்கள்					குழந்தை பிறந்து இறந்தது		கருச் சிதைவு/ கருக்கலைப்பு		
	வயது	பால்	இடம்	முறை	பிரசவம் பார்த்தவர்	வயது	பால்	சிதைவு/ கலைப்பு	எத்தனை மாதங்கள்	இடம்

பகுதி–4: கருத்தடை முறை பயன்பாடுகள்

17) தாங்களோ (அ) தங்கள் கணவரோ குடும்பக் கட்டுப்பாடு அறுவை சிகிச்சை செய்துள்ளீர்களா?

அ) ஆம்

ஆ) இல்லை

இல்லை– எனில் கே.எண்.18 செல்லவும்

ஆம்– எனில்,

அ) நிரந்தர ஆண் குடும்ப நல அறுவை சிகிச்சை

ஆ) நிரந்தர பெண் குடும்ப நல அறுவை சிகிச்சை

18) தாங்கள் இதுவரை பயன்படுத்தியுள்ள கருத்தடை முறைகள் என்ன? (கடந்த ஒரு வருடத்திற்கு முன்பு) .....

19) தாங்கள் இப்பொழுது பயன்படுத்தும் கருத்தடை முறைகள் என்ன? .....

பகுதி–5: தன் சுத்தம் மற்றும் மாதவிலக்கு சுத்தம்

20) தாங்கள் சிறுநீர் கழிப்பதற்கு கழிவறையை பயன்படுத்துவது உண்டா?

அ) ஆம்

ஆ) இல்லை

21) தாங்கள் சிறுநீர் கழித்த பின் பிறப்புறுப்புகளை நீரால் அலம்புவது உண்டா?

அ) ஆம்

ஆ) இல்லை

22) தாங்கள் மாதவிலக்கு காலங்களில் என்ன வகையான நாப்கின்களை உபயோகப்படுத்துவீர்கள்?

அ) துணி/ வீட்டில் தயாரிக்கப்பட்ட நாப்கின்

ஆ) கடையில் விற்கும் நாப்கின்

இ) இரண்டும்

(அ) அல்லது (இ) எனில் கே.எண்.23 செல்லவும்

23) ஒருமுறை உபயோகப்படுத்திய துணியை/ வீட்டில் தயாரிக்கப்பட்ட நாப்கின்களை அடுத்த முறை உபயோகிப்பது உண்டா?

அ) ஆம்

ஆ) இல்லை

ஆம்–எனில் கே.எண்.24 செல்லவும்

24) மீண்டும் பயன்படுத்தும் முன், தாங்கள் எப்படி சுத்தப்படுத்துவீர்கள்?

அ) சோப்பும், நீரும் மட்டும் உபயோகிப்பேன்

ஆ) சோப்பு, நீருடன் கிருமி நாசினியும் உபயோகிப்பேன்

25) தாங்கள் அந்த துணியை எப்படி உலர வைப்பீர்கள்?

அ) வெயிலில் காய வைப்பேன்

ஆ) நிழலில் காய வைப்பேன்

தங்களின் ஒத்துழைப்பிற்கு நன்றி.

ANNEXURE-3

MODIFIED BG PRASAD'S CLASSIFICATION FOR 2011

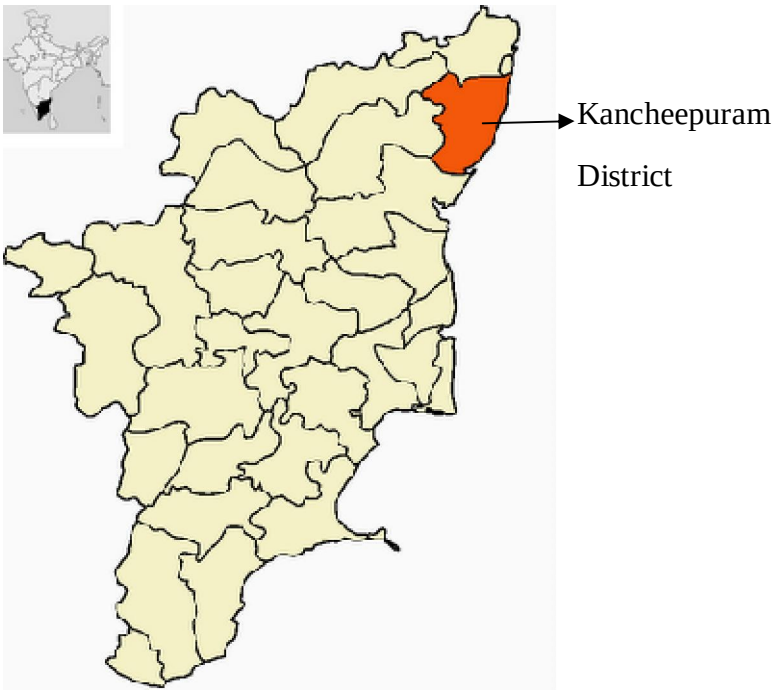
CPI for rural laborers in Tamilnadu in the month of August, 2011 - 574

Multiplication factor= Value of CPI ×4.93/100=28.3

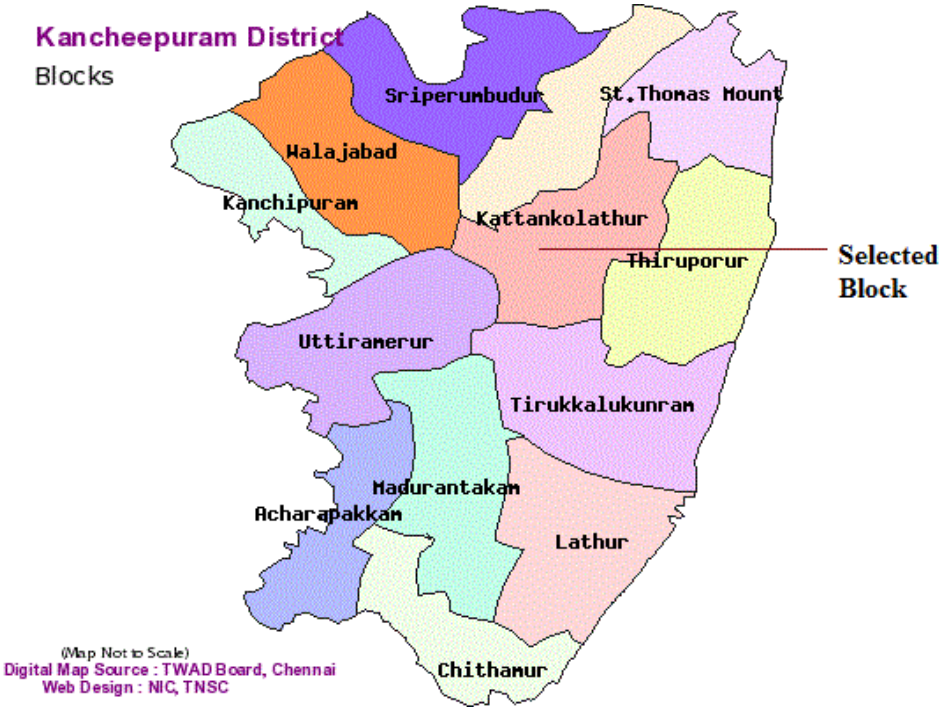
CLASS	OLD CLASSIFICATION	FOR AUGUST 2011
I	100 & above	2830 & above
II	50-99	1415-2829
III	30-49	850-1414
IV	15-29	425-849
V	<15	<425

ANNEXURE-4: MAPS

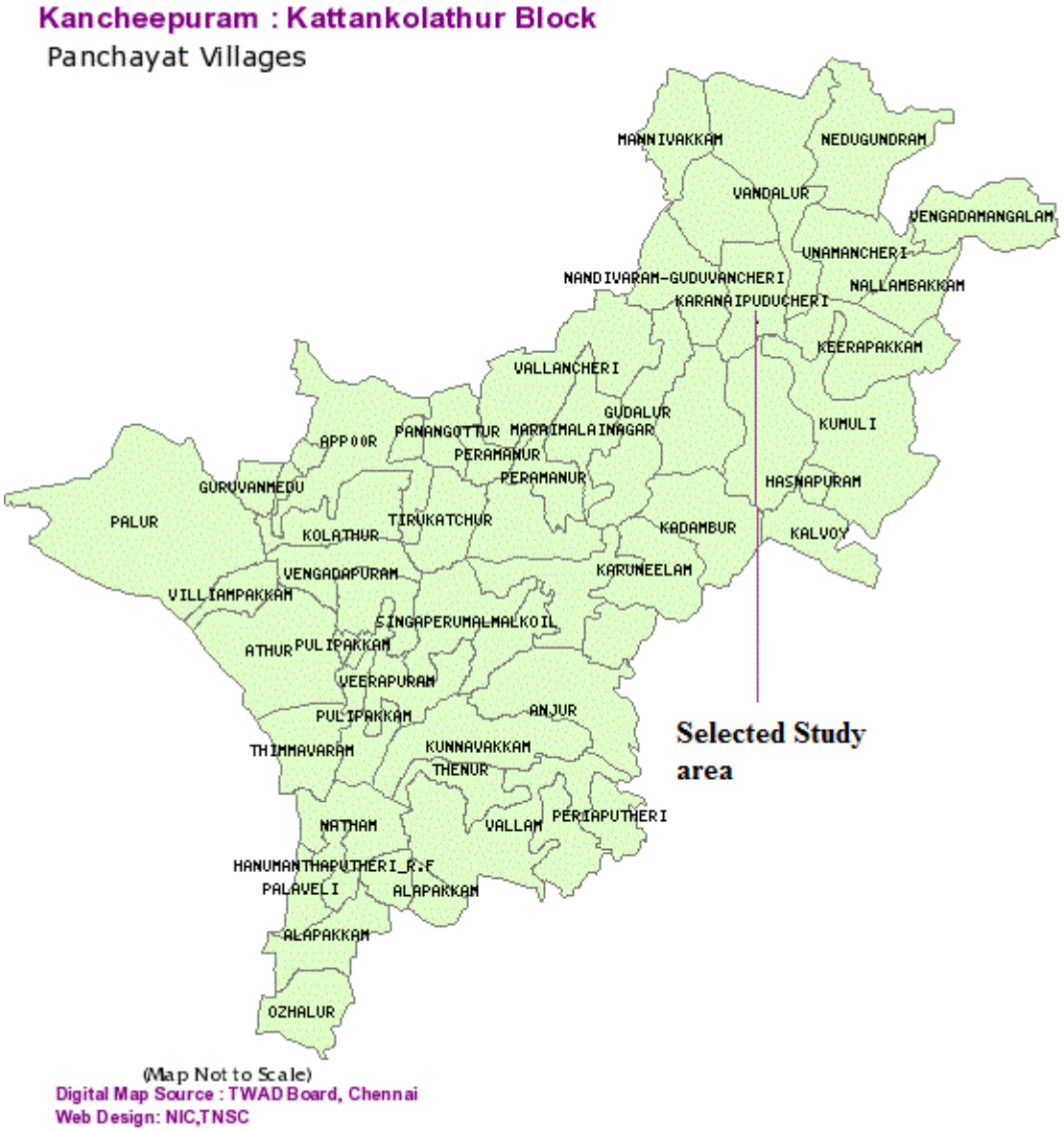
TAMIL NADU DISTRICT MAP WITH KANCHEEPURAM DISTRICT



KANCHEEPURAM DISTRICT- BLOCK MAP



KATTANKOLATHUR BLOCK- VILLAGE MAP



ANNEXURE-5

KEY TO MASTER CHART

Column	Variable	Label of variable/Question	Values
A	Sln	Serial number	
B	Page	Participant's age	
C	Sage	Spouse's age	
D	Marst	Marital status	1-Currently married 2-widowed/divorced/separated/ deserted
E	Marage	Age at marriage	In years
F	Mardur	Duration since marriage	In years
G	Rel	Religion of participant	1-hindu, 2-muslim, 3-christian, 4-others
H	Paredu	Education status of participant	1-illiterate; 2-1 to 5 years 3- 6 to 10 years 4-higher secondary completed; 5-college
I	Spedu	Education status of spouse	-do-
J	Occu	Work status of participant	1-self employed; 2-daily wages; 3-monthly salaried; 4-not working
K	Famtyp	Type of family	1-nuclear family; 2-joint family/three generation / extended nuclear family
L	Nomem	No of members in family	

M	Totinc	Total income of family	In rupees/ month
N	PCI	Per capita income	In rupees/month
O	VD	Abnormal Vaginal discharge +/-	1-yes; 0-no
P	GU	Genital ulcer +/-	1-yes 0-no
Q	LAP	Lower abdominal pain +/-	1-yes 0-no
R	Painuri	Pain during urination +/-	1-yes 0-no
S	Ingswel	Swelling in inguinal region/ groin +/-	1-yes 0-no
T	Blis	Painful blisters around vagina +/-	1-yes 0-no
U	Painsi	Pain during sexual intercourse +/-	1-yes 0-no
V	Spotsi	Spotting after sexual intercourse +/-	1-yes 0-no
W	AnyRTI	Presence of any one of symptoms of RTI	1-yes 0-no
X	Parity	No. of pregnancies (all conceptions regardless of the result of conception)	In numbers 0-no single conception
Y	Agefc	Age at first conception	In years
Z	Nolb	No. of live births	In numbers
AA	Novd	No. of vaginal deliveries among the live births	In numbers
AB	Nocs	No. of caesarean sections among the live births	In numbers
AC	Noabor	No. of abortions	In numbers

AD	Nospont	No. of spontaneous abortions among the abortions	In numbers
AE	Noind	No. of induced abortions among the abortions	In numbers
AF	PS	Permanent sterilisation +/-	1-male sterilisation 2-female sterilisation 0-no
AG	Conteu	Contraceptive ever used	0-none 1-oral contraceptive pills 2-copper- T 3-Condoms 4-others
AH	Contcu	Contraceptive currently using	-do-
AI	toiletuse	Toilet for urination purposes +/-	1-yes 0-no
AJ	Washpp	Do you wash private parts after urination +/-	1-yes 2-no
AK	Napkin	Type of napkin used during periods	1-cloth/homemade sanitary pad 2-commercial sanitary napkin 3-both
AL	Reuse	Do you reuse? (if 1 or 3 to AK)	1-yes 0-no
AM	Washre	How do you wash before reusing?	1-soap and water only 2-soap and water with disinfectant
AN	Dryre	How do you dry the cloth?	1-sunlight 2-shade

ANNEXURE 6
MASTER CHART

Sln	Page	Sage	Marst	Marage	Mardur	Rel	Paredu	Spedu	Occu	Famtyp	Nomem	Totinc	PCI	VD	GU	LAP	Painuri	Ingswel	Blis	Painsi	Spotsi	AnyRTI	Parity	Agefc	Nolb	Novd	Nocs	Noabor	Nospont	Noind	PS	Conteu	Contcur	toiletuse	Washpp	Napkin	Reuse	Washre	Dryre
1	39	40	1	26	13	1	4	4	4	1	4	8000	2000	0	0	0	0	0	0	0	0	0	3	27	2	2	0	1	0	1	2	1	0	1	1	2	.	.	.
2	37	40	1	21	16	3	3	3	4	2	5	10000	2000	0	0	0	0	0	0	0	0	0	2	21	2	2	0	0	0	0	2	0	0	1	1	1	1	1	2
3	24	30	1	21	3	1	3	3	4	1	3	7000	2333	0	0	0	0	0	0	0	0	0	2	22	2	2	0	0	0	0	0	0	3	1	1	2	.	.	.
4	38	58	1	18	20	1	3	3	4	1	4	12000	3000	0	0	0	0	0	0	1	0	1	4	20	2	2	0	2	0	2	2	2	0	1	1	1	1	2	1
5	38	40	1	20	18	1	3	3	4	1	4	7000	1750	0	0	0	0	0	0	0	0	0	3	20	2	2	0	1	1	0	2	0	0	1	1	2	.	.	.
6	35	41	1	22	13	1	3	2	4	2	5	10000	2000	0	0	0	0	0	0	0	0	0	3	22	2	0	2	1	0	1	2	0	0	1	1	2	.	.	.
7	27	30	1	26	1	1	5	5	3	2	5	40000	8000	0	0	0	0	0	0	0	0	0	1	26	0	0	0	1	1	0	0	0	3	1	1	2	.	.	.
8	37	42	1	23	14	3	3	5	4	1	4	7000	1750	0	0	0	0	0	0	0	0	0	3	23	2	0	2	1	1	0	0	2	0	1	1	2	.	.	.
9	27	33	1	22	5	3	2	2	4	1	4	4000	1000	1	0	0	0	0	0	0	0	1	2	23	1	0	1	1	0	1	0	1	0	0	0	2	.	.	.
10	31	35	1	27	4	1	3	4	4	1	4	15000	3750	0	1	0	0	0	0	0	0	1	2	27	2	1	1	0	0	0	0	0	3	1	1	2	.	.	.
11	30	38	1	13	17	1	3	3	4	1	5	16000	3200	1	0	0	0	0	0	0	0	1	3	16	3	3	0	0	0	0	2	0	0	0	0	1	1	2	1
12	34	44	1	26	8	1	2	2	4	1	3	7000	2333	1	0	1	1	0	0	0	0	1	5	26	1	1	0	4	4	0	0	0	0	0	0	2	.	.	.
13	25	32	1	19	6	1	4	4	4	2	7	15000	2143	0	0	0	0	0	0	0	0	0	2	20	2	2	0	0	0	0	2	2	0	1	1	2	.	.	.
14	24	27	1	21	3	1	4	1	4	1	2	3000	1500	0	0	0	0	0	0	1	1	1	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
15	29	33	1	23	6	1	5	4	4	2	6	8000	1333	0	0	0	0	0	0	0	0	0	2	23	2	2	0	0	0	0	2	0	0	1	1	2	.	.	.
16	26	34	1	22	4	1	4	4	4	2	6	10000	1667	1	0	0	0	0	0	0	0	1	1	22	1	1	0	0	0	0	0	0	3	1	1	2	.	.	.
17	22	29	1	21	1	1	5	5	4	2	5	15000	3000	1	1	0	0	0	0	0	0	1	1	21	0	0	0	1	1	0	0	0	0	1	1	2	.	.	.
18	28	32	1	22	6	1	3	5	4	1	3	5000	1667	0	0	0	0	0	0	0	0	0	1	24	1	1	0	0	0	0	0	0	3	1	1	1	1	1	2
19	42	49	1	19	23	1	4	3	4	1	4	5000	1250	0	0	0	0	0	0	0	0	0	2	21	2	2	0	0	0	0	2	0	0	1	1	1	1	2	2
20	30	31	1	24	6	1	4	4	4	1	3	5000	1667	1	0	0	0	0	0	0	0	1	1	27	1	1	0	0	0	0	0	0	0	1	0	2	.	.	.
21	24	27	1	24	0	1	4	3	4	2	8	10000	1250	1	0	0	0	0	0	0	0	1	0	.	.	.	.	.	.	.	0	0	0	1	0	2	.	.	.
22	43	53	1	18	25	1	4	5	3	1	2	2000	1000	0	0	0	0	0	0	0	0	0	4	20	3	3	0	1	0	1	2	2	0	1	1	3	1	1	2
23	38	48	1	18	20	1	2	3	4	1	2	10000	5000	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	3	0	0	1	2	.	.	.
24	42	48	1	22	20	1	2	3	4	1	4	30000	7500	0	0	0	0	0	0	0	0	0	5	22	3	3	0	2	0	2	2	0	0	0	1	2	.	.	.
25	21	30	1	19	2	1	3	5	4	2	6	15000	2500	0	0	0	0	0	0	0	0	0	2	19	2	2	0	0	0	0	0	0	0	1	1	2	.	.	.
26	24	26	1	24	0	1	5	5	4	1	2	12000	6000	0	0	0	0	0	1	0	0	1	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
27	26	31	1	26	0	1	5	5	4	1	2	10000	5000	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
28	28	30	1	19	9	1	2	2	4	1	5	7000	1400	0	0	0	0	0	0	1	0	1	3	22	3	3	0	0	0	0	2	0	0	0	0	1	1	1	2
29	25	29	1	21	4	1	3	5	4	2	5	8000	1600	0	0	0	0	0	0	0	0	0	1	22	1	0	1	0	0	0	0	0	0	1	1	2	.	.	.
30	19	21	1	19	0	1	4	5	4	2	10	10000	1000	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
31	25	28	1	15	10	1	2	3	4	1	4	5000	1250	1	0	1	0	0	0	0	0	1	2	17	2	2	0	0	0	0	2	0	0	0	1	2	.	.	.
32	25	33	1	19	6	1	4	5	4	1	4	5000	1250	0	0	0	0	0	0	0	0	0	2	22	2	2	0	0	0	0	2	2	0	1	1	2	.	.	.
33	26	37	1	17	9	1	3	1	4	1	4	4000	1000	0	0	0	0	0	0	0	0	0	2	18	2	0	2	0	0	0	2	0	0	1	1	2	.	.	.
34	21	30	1	17	4	1	3	3	4	1	4	3000	750	0	0	0	0	0	0	1	0	1	2	19	2	0	2	0	0	0	2	0	0	1	1	1	1	1	2
35	42	49	1	10	32	2	1	3	4	1	2	5000	2500	1	0	0	0	0	0	0	0	1	0	.	.	.	.	.	.	.	0	0	0	0	0	1	1	1	2
36	41	45	1	18	23	1	2	2	1	1	3	3000	1000	0	0	1	0	0	0	0	0	1	3	19	1	0	1	2	2	0	0	0	0	0	0	1	1	1	2
37	31	34	1	19	12	1	2	3	4	1	4	6000	1500	0	0	0	0	0	0	0	0	0	2	20	2	2	0	0	0	0	2	0	0	1	0	1	0	.	.
38	28	32	1	20	8	1	3	3	4	1	4	5000	1250	0	0	0	0	0	0	0	0	0	2	20	2	2	0	0	0	0	2	0	0	1	1	2	.	.	.
39	24	30	1	21	3	1	5	5	4	1	3	8000	2667	0	0	0	0	0	0	0	0	0	1	21	1	1	0	0	0	0	0	2	0	1	1	2	.	.	.
40	24	27	1	21	3	1	3	3	4	2	4	8000	2000	0	0	0	0	0	0	0	0	0	1	22	1	0	1	0	0	0	0	0	0	1	1	2	.	.	.
41	23	25	1	21	2	1	3	3	4	2	4	8000	2000	1	0	1	0	0	0	0	0	1	1	21	1	1	0	0	0	0	0	0	0	1	1	1	1	1	2
42	38	40	1	26	12	1	3	5	4	1	4	9000	2250	0	0	0	0	0	0	0	0	0	2	25	2	2	0	0	0	0	0	2	0	1	1	2	.	.	.
43	31	38	1	20	11	1	5	4	4	1	4	8000	2000	0	0	0	0	0	0	0	0	0	2	20	2	0	2	0	0	0	2	0	0	1	1	2	.	.	.
44	26	34	1	20	6	3	3	3	4	1	4	6000	1500	0	0	0	0	0	0	0	0	0	2	20	3	3	0	0	0	0	2	2	0	1	1	2	.	.	.
45	35	42	2	21	14	1	5	4	3	1	4	5000	1250	0	0	0	0	0	0	0	0	0	4	21	2	2	0	2	0	2	0	3	3	1	1	2	.	.	.
46	30	33	2	28	2	1	5	5	3	2	6	2E+05	33333	0	0	0	0	0	0	0	0	0	1	29	1	0	1	0	0	0	0	3	0	1	1	2	.	.	.
47	45	49	1	18	27	3	3	3	4	1	4	50000	12500	0	0	0	0	0	0	0	0	0	2	20	2	2	0	0	0	0	2	0	0	1	1	1	1	1	2
48	28	38	1	15	13	1	3	3	4	1	4	3000	750	1	0	0	0	0	0	0	0	1	3	15	2	2	0	1	1	0	2	2	0	1	0	1	1	1	2
49	44	48	1	16	28	1	3	3	4	1	5	8000	1600	0	0	0	0	0	0	0	0	0	4	17	3	3	0	1	1	0	2	2	0	1	0	1	1	1	2
50	38	40	2	17	21	1	3	1	3	2	3	3000	1000	0	0	0	0	0	0	1	0	1	1	18	1	1	0	0	0	0	2	0	0	1	0	1	1	1	1
51	35	40	1	22	13	1	3	3	4	1	4	5000	1250	0	0	0	0	0	0	0	0	0	3	23	2	0	2	1	1	0	2	0	0	1	1	1	1	1	2
52	21	27	1	21	0	1	3	2	4	2	3	8000	2667	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
53	24	27	1	20	4	2	3	3	4	1	5	4000	800	0	0	0	0	0	0	0	0	0	3	20	3	3	0	0	0	0	2	0	0	1	1	2	.	.	.
54	30	34	1	28	2	2	2	2	4	1	4	10000	2500	0	0	0	0	0	0	0	0	0	2	28	2	0	2	0	0	0	2	0	0	0	0	2	.	.	.
55	20	24	1	19	1	1	3	4	4	1	3	3000	1000	1	0	0	0	0	0	0	0	1	1	19	1	1	0	0	0	0	0	0	0	1	1	2	.	.	.
56	27	28	1	24	3	1	5	4	4	2	7	7000	1000	0	0	0	0	0	0	0	0	0	2	24	2	0	2	0	0	0	2	2	0	1	1	2	.	.	.

Sln	Page	Sage	Marst	Marage	Mardur	Rel	Paredu	Spedu	Occu	Famtyp	Nomem	Totinc	PCI	VD	GU	LAP	Painuri	Ingswel	Blis	Painsi	Spotsi	AnyRTI	Parity	Agefc	Nolb	Novd	Nocs	Noabor	Nospont	Noind	PS	Conteu	Contcur	toiletuse	Washpp	Napkin	Reuse	Washre	Dryre
57	27	29	1	18	9	1	3	3	4	1	4	5000	1250	0	0	0	0	0	1	0	0	1	2	19	2	2	0	0	0	0	0	0	2	1	1	3	0	.	.
58	20	23	1	19	1	1	3	2	4	1	3	6000	2000	0	0	0	0	0	0	0	0	0	1	19	1	1	0	0	0	0	0	0	1	1	2	.	.	.
59	27	31	1	23	4	1	4	3	4	1	4	6000	1500	0	0	0	0	0	0	0	0	0	2	24	2	0	2	0	0	0	2	0	0	1	1	2	.	.	.
60	24	28	1	23	1	1	2	3	4	2	3	4000	1333	1	0	0	0	0	0	0	0	1	0	.	.	.	.	.	.	.	0	0	0	1	0	3	1	1	2
61	45	61	1	15	27	1	3	4	4	2	5	10000	2000	0	0	0	0	0	0	0	0	0	5	15	5	5	0	0	0	0	2	0	0	1	1	1	1	1	2
62	40	45	1	18	22	1	3	3	4	1	4	6000	1500	1	0	0	1	0	0	0	0	1	2	19	2	2	0	0	0	0	2	2	0	1	0	2	.	.	.
63	45	51	2	24	21	1	2	3	4	1	3	20000	6667	1	0	0	0	0	0	1	1	1	2	24	2	2	0	0	0	0	0	2	0	0	1	2	.	.	.
64	38	42	1	31	7	1	5	5	4	2	3	10000	3333	1	0	0	0	0	0	0	0	1	0	.	.	.	.	.	.	.	0	0	3	1	1	2	.	.	.
65	22	30	1	20	2	1	4	5	4	1	3	10000	3333	1	0	0	0	0	0	0	0	1	1	20	1	0	1	0	0	0	0	0	2	1	0	2	.	.	.
66	23	27	1	19	4	1	3	4	4	1	4	10000	2500	0	0	0	0	0	0	0	0	0	2	20	2	1	1	0	0	0	2	0	0	1	1	2	.	.	.
67	42	50	1	20	22	1	3	2	4	1	3	5000	1667	0	0	0	0	0	0	0	0	0	2	26	1	0	1	1	1	0	0	2	0	1	1	3	1	1	1
68	28	31	1	27	1	2	3	3	4	1	3	8000	2667	0	0	0	0	0	0	0	0	0	1	27	1	0	1	0	0	0	0	0	3	1	1	2	.	.	.
69	22	29	1	22	0	1	3	1	2	2	5	10000	2000	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
70	30	32	1	19	11	1	1	2	2	2	7	5000	714	0	0	0	0	0	1	0	0	1	2	19	2	2	0	0	0	0	2	2	0	0	1	1	1	1	2
71	28	35	1	21	7	1	2	1	2	1	2	3000	1500	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
72	23	26	1	23	0	1	3	3	2	2	5	5000	1000	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0	1	1	3	1	1	1
73	40	45	2	30	10	1	1	2	2	1	4	3000	750	1	0	1	1	0	0	0	0	1	1	30	1	1	0	0	0	0	0	2	0	0	0	1	1	1	2
74	42	49	1	17	15	1	2	2	2	1	3	7000	2333	0	0	0	0	0	0	0	0	0	3	19	3	3	0	0	0	0	2	0	0	0	1	1	1	1	2
75	42	52	1	17	15	1	3	2	4	1	4	18000	4500	0	0	0	0	0	0	0	0	0	2	21	2	2	0	0	0	0	2	0	0	1	1	1	1	1	2
76	32	38	1	23	9	1	2	3	4	1	3	4000	1333	0	0	0	0	0	0	0	0	0	1	25	1	0	1	0	0	0	0	0	0	1	1	3	1	1	2
77	29	30	1	29	0	3	3	5	4	1	2	5000	2500	1	0	0	0	0	0	0	0	1	0	.	.	.	.	.	.	.	0	0	1	1	1	2	.	.	.
78	19	27	1	18	1	3	3	3	4	1	2	6000	3000	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
79	20	29	1	18	2	1	3	5	4	1	4	5000	1250	0	0	0	0	0	0	0	0	0	2	18	2	0	2	0	0	0	2	0	0	1	1	2	.	.	.
80	25	33	1	16	9	1	3	4	4	1	4	5000	1250	0	0	0	0	0	0	0	0	0	2	17	2	0	2	0	0	0	2	0	0	1	1	2	.	.	.
81	25	28	1	24	1	1	4	4	4	1	3	6000	2000	0	0	0	0	0	0	0	0	0	2	25	1	0	1	1	1	0	0	0	0	1	1	2	.	.	.
82	41	48	1	18	13	1	5	4	4	2	5	10000	2000	1	0	0	0	0	0	0	0	1	2	24	1	0	1	1	0	1	2	0	0	1	1	1	1	1	2
83	28	30	1	20	8	1	3	3	4	2	6	10000	1667	1	0	0	0	0	0	0	0	1	2	21	2	2	0	0	0	0	2	2	0	1	0	1	1	1	2
84	34	39	1	22	12	1	2	5	4	1	4	6000	1500	0	0	0	0	0	0	0	0	0	2	23	2	2	0	0	0	0	2	2	0	1	1	2	.	.	.
85	42	50	2	20	22	1	3	1	3	1	2	8000	4000	0	1	0	0	0	1	0	0	1	0	.	.	.	.	.	.	.	0	0	0	1	1	3	1	1	1
86	38	45	1	21	17	1	3	3	4	1	2	10000	5000	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
87	38	39	1	28	10	3	3	3	4	2	5	10000	2000	0	0	0	0	0	0	0	0	0	3	28	2	0	2	1	1	0	2	2	0	1	1	3	1	1	1
88	45	46	1	20	25	1	2	2	4	1	4	6000	1500	0	0	0	0	0	0	0	0	0	2	21	2	0	2	0	0	0	2	0	0	0	1	3	1	1	2
89	30	33	1	21	9	1	3	4	4	1	3	7000	2333	0	0	0	0	0	0	0	0	0	1	23	1	0	1	0	0	0	0	2	0	1	1	2	.	.	.
90	41	42	1	23	18	1	3	5	4	1	4	30000	7500	0	0	0	0	0	0	1	0	1	2	25	2	2	0	0	0	0	0	2	0	1	1	1	1	1	2
91	26	30	1	25	1	1	5	5	3	2	4	20000	5000	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
92	33	45	1	19	14	1	4	3	4	2	11	10000	909	1	0	0	0	0	0	0	0	1	2	20	2	2	0	0	0	0	0	2	1	1	0	2	.	.	.
93	40	47	1	16	24	3	2	2	4	1	6	6000	1000	0	0	0	0	0	0	0	0	0	4	16	4	4	0	0	0	0	2	0	0	1	1	3	1	1	2
94	25	33	1	19	6	1	3	2	4	1	3	4000	1333	0	0	0	0	0	0	0	0	0	1	23	1	0	1	0	0	0	0	0	0	1	1	2	.	.	.
95	28	30	1	26	2	1	5	5	3	2	5	70000	14000	0	0	0	0	0	0	0	0	0	1	26	1	1	0	0	0	0	0	0	0	1	1	2	.	.	.
96	25	25	1	23	2	1	2	2	4	1	3	4000	1333	1	0	0	0	0	0	0	0	1	1	24	1	1	0	0	0	0	0	0	2	0	1	1	1	1	2
97	34	38	1	19	15	1	3	1	4	1	5	5000	1000	0	0	0	0	0	0	0	0	0	3	20	3	3	0	0	0	0	0	2	0	1	1	1	1	1	2
98	43	45	1	18	25	1	3	2	4	1	4	4000	1000	0	0	0	0	0	0	0	0	0	2	20	2	2	0	0	0	0	0	0	0	1	1	1	1	1	2
99	30	35	1	21	9	3	5	5	4	2	5	20000	4000	1	0	0	0	0	0	0	0	1	2	22	2	1	1	0	0	0	2	2	0	1	0	1	1	1	1
100	45	47	2	13	32	1	1	1	2	1	5	10000	2000	1	0	0	0	0	0	0	0	1	5	22	4	4	0	1	1	0	2	2	0	1	0	1	1	1	2
101	23	27	1	21	2	1	5	5	3	1	3	20000	6667	1	0	0	0	0	0	0	0	1	1	22	1	1	0	0	0	0	0	0	2	1	1	2	.	.	.
102	31	37	1	26	5	1	5	5	4	2	6	10000	1667	0	0	0	0	0	0	0	0	0	1	26	1	1	0	0	0	0	0	2	0	1	1	2	.	.	.
103	42	43	2	24	18	1	1	1	4	1	3	6000	2000	0	0	0	0	0	1	0	0	1	3	25	3	3	0	0	0	0	2	2	0	1	1	1	1	1	2
104	25	27	1	23	2	1	3	3	4	2	6	7000	1167	0	0	0	0	0	0	0	0	0	1	24	1	1	0	0	0	0	0	0	3	1	1	2	.	.	.
105	45	49	1	20	25	1	2	3	4	1	3	8000	2667	1	0	0	0	0	0	0	0	1	2	23	1	1	0	1	1	0	0	2	0	0	0	1	1	1	2
106	44	50	1	17	27	1	3	3	4	1	4	20000	5000	0	0	0	0	0	0	0	0	0	2	21	2	2	0	0	0	0	2	2	0	1	1	1	1	1	1
107	45	54	1	18	27	1	2	3	4	1	6	10000	1667	0	0	0	0	0	0	1	1	1	4	21	4	4	0	0	0	0	2	0	0	1	1	1	1	1	1
108	31	40	1	19	12	1	2	3	4	1	4	7000	1750	1	0	0	0	0	0	0	0	1	2	19	2	2	0	0	0	0	2	2	0	1	0	2	.	.	.
109	23	25	1	22	1	3	5	5	4	1	3	36000	12000	0	0	0	0	0	0	0	0	0	1	23	1	0	1	0	0	0	0	0	3	1	1	2	.	.	.
110	24	31	1	19	5	1	3	4	4	1	4	12000	3000	0	0	0	0	0	0	0	0	0	2	19	2	2	0	0	0	0	0	0	0	1	1	2	.	.	.
111	35	41	1	20	15	3	5	5	4	1	4	50000	12500	0	0	0	0	0	0	0	0	0	2	21	2	2	0	0	0	0	2	3	0	1	1	2	.	.	.
112	34	38	1	23	11	1	4	4	4	2	8	10000	1250	0	0	0	0	0	0	0	0	0	2	23	2	2	0	0	0	0	2	2	0	1	1	2	.	.	.
113	21	29	1	20	1	1	5	4	4	1	3	5000	1667	0	0	0	0	0	0	0	0	0	1	20	1	0	1	0	0	0	0	0	2	1	1	2	.	.	.
114	32	32	1	28	4	1	3	5	4	1	2	6000	3000	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
115	24	27	1	20	4	3	4	5	4	1	4	6000	1500	0	0	0	0	0	0	0	0	0	2	20	2	0	2	0	0	0	0	2	3	1	1	2	.	.	.
116	33	37	1	10	23	1	3	5	4	1	5	5000	1000	1	0	0	0	0	0	0	0	1	3	12	3	3	0	0	0	0	2	0	0	1	0	2	.	.	.

Sln	Page	Sage	Marst	Marage	Mardur	Rel	Paredu	Spedu	Occu	Famtyp	Nomem	Totinc	PCI	VD	GU	LAP	Painuri	Ingswel	Blis	Painsi	Spotsi	AnyRTI	Parity	Agefc	Nolb	Novd	Nocs	Noabor	Nospont	Noind	PS	Conteu	Contcur	toiletuse	Washpp	Napkin	Reuse	Washre	Dryre
117	27	29	1	25	2	3	5	5	4	1	3	20000	6667	0	0	0	0	0	0	0	0	0	1	26	1	1	0	0	0	0	0	0	3	1	1	2	.	.	.
118	29	38	2	22	7	1	5	5	3	2	4	50000	1250	1	0	0	0	0	0	0	0	1	2	23	2	2	0	0	0	0	0	0	3	1	1	1	1	1	2
119	41	43	1	19	22	1	2	5	4	1	5	20000	4000	0	0	0	0	0	0	0	0	0	2	22	2	2	0	0	0	0	2	2	0	1	1	2	.	.	.
120	26	27	1	23	3	1	5	3	3	1	3	10000	3333	1	0	0	0	0	0	0	0	1	1	24	1	0	1	0	0	0	0	0	2	1	1	2	.	.	.
121	24	28	1	17	7	1	3	2	3	2	5	10000	2000	1	0	1	0	0	0	0	0	1	2	18	2	1	1	0	0	0	2	2	0	1	0	2	.	.	.
122	27	40	1	19	8	1	2	3	4	1	5	6000	1200	0	0	0	0	0	0	0	0	0	4	19	4	4	0	0	0	0	0	0	0	1	1	1	1	1	2
123	25	28	1	23	2	1	5	5	3	2	6	25000	4167	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	3	1	1	2	.	.	.
124	31	38	1	24	7	1	5	5	4	1	4	5000	1250	0	0	0	0	0	0	0	0	0	2	25	2	0	2	0	0	0	2	0	0	1	1	2	.	.	.
125	28	32	1	27	1	3	3	3	4	2	4	4000	1000	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
126	42	48	1	18	24	2	1	3	4	1	4	8000	2000	0	0	0	0	0	0	1	1	1	2	24	2	2	0	0	0	0	2	2	0	1	1	1	1	2	1
127	35	45	1	23	12	3	4	5	4	1	5	12000	2400	1	0	0	0	0	0	0	0	1	3	24	3	2	1	0	0	0	2	2	0	1	0	2	.	.	.
128	31	34	1	25	6	3	5	5	4	1	2	10000	5000	0	0	0	0	0	0	0	0	0	1	26	0	0	0	1	1	0	0	0	0	1	1	2	.	.	.
129	41	52	1	18	23	1	4	5	4	1	4	20000	5000	0	0	0	0	0	0	0	0	0	2	19	2	2	0	0	0	0	2	0	0	1	1	2	.	.	.
130	32	33	1	29	3	1	3	5	4	1	3	9000	3000	0	0	0	0	0	0	0	0	0	1	30	1	0	1	0	0	0	0	0	0	1	1	2	.	.	.
131	42	55	1	20	22	1	3	3	4	1	3	6000	2000	0	0	0	0	0	0	0	0	0	1	21	1	0	1	0	0	0	0	0	0	1	1	1	1	2	2
132	43	48	1	19	24	1	2	2	4	2	4	6000	1500	0	0	0	0	0	0	0	0	0	2	21	2	2	0	0	0	0	2	2	0	1	1	1	1	1	2
133	25	33	1	19	6	1	3	3	4	2	6	10000	1667	1	0	0	0	0	0	0	0	1	2	21	2	2	0	0	0	0	2	2	0	1	0	2	.	.	.
134	42	56	1	19	23	1	2	3	4	1	4	10000	2500	0	0	0	0	0	0	0	0	0	2	19	2	2	0	0	0	0	2	0	0	1	1	1	1	2	1
135	24	30	1	23	1	1	4	4	4	2	5	15000	3000	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
136	27	28	1	23	4	1	1	3	4	1	4	5000	1250	1	0	0	0	0	0	0	0	1	2	23	2	2	0	0	0	0	2	2	0	1	1	1	1	1	2
137	30	38	1	19	11	1	2	2	4	1	4	7000	1750	0	0	0	0	0	0	0	0	0	2	21	2	2	0	0	0	0	2	0	0	1	1	2	.	.	.
138	30	37	1	21	9	1	3	2	4	1	4	7000	1750	0	0	0	0	0	1	0	0	1	2	23	2	2	0	0	0	0	2	0	0	1	1	1	1	1	2
139	23	34	1	20	3	3	3	3	4	2	5	18000	3600	1	0	0	0	0	0	0	0	1	1	22	1	1	0	0	0	0	0	0	2	1	0	2	.	.	.
140	26	33	1	23	3	1	5	5	4	2	5	12000	2400	0	0	0	0	0	0	0	0	0	1	25	1	0	1	0	0	0	0	0	0	1	1	2	.	.	.
141	30	31	1	25	5	3	3	3	4	1	4	8000	2000	0	0	0	0	0	0	0	0	0	2	27	2	1	1	0	0	0	0	0	0	1	1	3	0	.	.
142	40	44	2	18	22	3	2	1	4	1	4	3000	750	0	0	0	0	0	0	0	0	0	3	18	3	3	0	0	0	0	2	2	0	1	1	1	1	2	2
143	35	47	1	17	18	3	2	3	4	1	3	3000	1000	0	0	0	0	0	0	0	0	0	1	33	1	0	1	0	0	0	0	0	0	1	1	1	1	1	2
144	24	28	1	19	5	1	4	3	4	1	4	4000	1000	1	0	0	0	0	0	0	0	1	2	19	2	2	0	0	0	0	0	2	1	1	1	2	.	.	.
145	23	28	1	22	1	3	4	3	4	1	3	15000	5000	0	0	0	0	0	0	0	0	0	1	22	0	0	0	1	1	0	0	0	3	1	1	2	.	.	.
146	45	52	1	18	27	1	1	2	4	1	2	4000	2000	0	0	0	0	0	0	0	0	0	2	19	2	0	2	0	0	0	2	0	0	1	1	1	1	2	2
147	30	38	1	18	12	1	3	3	4	1	2	3000	1500	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	3	1	1	2	.	.	.
148	40	50	1	21	19	1	2	3	4	1	5	5000	1000	1	0	0	0	0	0	0	0	1	3	24	3	3	0	0	0	0	0	2	2	1	0	1	1	1	2
149	30	40	1	25	5	1	3	3	4	1	2	5000	2500	1	0	1	1	0	0	0	0	1	0	0	.	.	.	.	.	.	.	0	0	0	1	0	2	.	.	.
150	28	34	1	24	4	1	3	3	4	1	4	7000	1750	0	0	0	0	0	0	0	0	0	3	25	2	0	2	1	1	0	2	0	0	1	1	1	0	.	.
151	25	31	1	20	5	1	1	2	4	2	8	11000	1375	0	0	0	0	0	0	0	0	0	2	20	2	0	2	0	0	0	0	0	0	1	1	2	.	.	.
152	28	29	1	23	5	1	4	3	4	1	4	6000	1500	1	0	0	0	0	0	0	0	1	2	23	2	0	2	0	0	0	2	2	0	1	1	2	.	.	.
153	23	33	1	20	3	1	3	2	4	1	4	6000	1500	0	0	0	0	0	0	0	0	0	3	21	2	2	0	1	1	0	2	0	0	1	1	2	.	.	.
154	42	44	1	17	25	1	1	2	4	1	4	5000	1250	0	0	0	0	0	0	0	0	0	3	19	3	3	0	0	0	0	2	0	0	1	1	2	.	.	.
155	23	29	1	21	2	1	5	5	4	2	5	5000	1000	0	0	0	0	0	0	0	0	0	1	22	1	0	1	0	0	0	0	0	3	1	1	2	.	.	.
156	38	52	1	18	20	1	1	2	4	1	5	5000	1000	0	0	0	0	0	0	0	0	0	4	18	3	3	0	1	1	0	0	0	0	1	1	1	1	1	2
157	37	42	1	21	16	1	3	3	4	1	5	4500	900	0	0	0	0	0	1	0	0	1	3	28	3	3	0	0	0	0	0	0	2	1	1	1	1	1	2
158	45	47	1	19	26	1	1	2	4	1	4	3000	750	0	0	0	0	0	0	0	0	0	2	25	2	0	2	0	0	0	2	0	0	1	1	1	1	1	2
159	24	30	1	18	6	1	3	3	4	1	4	3000	750	0	0	0	0	0	0	0	0	0	2	19	2	0	2	0	0	0	2	0	0	1	1	1	1	1	2
160	23	33	1	19	4	1	3	5	4	1	3	5000	1667	0	0	0	0	0	0	0	1	1	1	21	1	1	0	0	0	0	0	0	3	1	1	1	1	1	2
161	38	65	1	16	22	1	2	1	4	1	4	4000	1000	1	0	0	0	0	0	0	0	1	2	16	2	2	0	0	0	0	2	3	0	1	0	1	1	1	2
162	35	40	1	20	15	1	1	3	4	2	5	8000	1600	0	0	0	0	0	0	0	0	0	2	22	2	0	2	0	0	0	2	0	0	1	1	1	1	2	1
163	38	50	1	17	21	1	3	2	4	1	6	4500	750	0	0	0	0	0	0	1	0	1	4	20	4	4	0	0	0	0	0	2	0	1	1	1	1	1	2
164	32	39	1	18	14	1	1	3	4	1	3	9000	3000	0	0	0	0	0	0	0	0	1	0	24	1	1	0	0	0	0	0	0	0	1	1	1	1	2	2
165	45	53	1	18	27	1	1	2	4	1	5	2400	480	0	0	0	0	0	0	0	0	0	3	23	3	3	0	0	0	0	0	3	0	1	1	1	0	.	.
166	21	24	1	21	0	1	4	5	4	2	6	10000	1667	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
167	45	65	1	15	30	1	1	4	4	2	10	10000	1000	0	0	0	0	0	0	0	0	0	3	21	3	3	0	0	0	0	2	2	0	1	1	1	0	.	.
168	24	34	1	15	9	1	3	1	4	1	4	10000	2500	0	0	0	0	0	0	0	0	0	2	15	2	2	0	0	0	0	0	0	2	1	1	2	.	.	.
169	18	22	1	16	0	1	3	3	4	1	2	6000	3000	1	0	0	0	0	0	0	0	1	0	0	.	.	.	.	.	.	.	0	0	1	1	1	2	.	.	.
170	25	30	1	25	0	1	3	3	4	2	8	5000	625	0	0	0	0	0	1	0	0	1	0	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
171	25	32	1	19	6	1	3	2	3	1	4	10000	2500	0	0	0	0	0	0	0	0	0	3	20	2	0	2	1	0	1	2	2	0	1	1	1	1	2	1
172	36	38	1	18	18	1	2	3	4	1	4	4000	1000	1	0	0	0	0	0	0	0	1	2	21	2	2	0	0	0	0	0	2	0	1	0	1	1	1	2
173	29	33	1	17	12	1	2	3	1	1	4	8000	2000	0	0	0	0	0	0	0	0	0	2	19	2	0	2	0	0	0	2	3	0	1	1	2	.	.	.
174	27	33	1	23	4	1	2	3	4	1	2	5000	2500	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	3	1	1	0	.	.
175	39	42	1	15	24	1	1	1	4	1	5	3000	600	0	0	0	0	0	0	0	0	0	3	24	3	3	0	0	0	0	2	0	0	1	1	3	1	1	2
176	25	26	1	22	3	1	5	5	4	1	3	3000	1000	0	0	0	0	0	0	0	0	0	1	24	1	0	1	0	0	0	0	0	3	1	1	2	.	.	.

Sln	Page	Sage	Marst	Marage	Mardur	Rel	Paredu	Spedu	Occu	Famtyp	Nomem	Totinc	PCI	VD	GU	LAP	Painuri	Ingswel	Blis	Painsi	Spotsi	AnyRTI	Parity	Agefc	Nolb	Novd	Nocs	Noabor	Nospont	Noind	PS	Conteu	Contcur	toiletuse	Washpp	Napkin	Reuse	Washre	Dryre
177	21	34	1	18	3	1	3	3	4	2	8	5000	625	0	0	0	0	0	0	0	0	0	1	19	1	1	0	0	0	0	0	0	2	1	1	2	.	.	.
178	22	32	1	21	1	1	3	3	4	1	4	10000	2500	0	0	0	0	0	0	1	0	1	2	21	2	2	0	0	0	0	0	0	1	1	1	1	2	1
179	23	26	1	20	3	1	3	3	1	1	3	6000	2000	0	0	0	0	0	0	0	0	0	1	21	1	1	0	0	0	0	0	0	1	1	2	.	.	.
180	30	35	1	15	15	3	2	2	4	1	4	8000	2000	1	0	0	0	0	0	0	0	1	2	20	2	2	0	0	0	0	2	2	0	1	0	2	.	.	.
181	20	25	1	20	0	1	3	2	4	1	2	8000	4000	0	0	0	1	0	0	0	0	1	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
182	40	50	2	16	24	1	1	3	2	1	2	5000	2500	0	0	0	0	0	0	0	0	0	1	16	1	1	0	0	0	0	0	0	1	1	1	1	2	1
183	40	50	1	14	26	1	1	1	4	1	5	3000	600	0	0	0	0	0	0	0	0	0	4	15	3	3	0	1	0	1	2	0	0	1	1	1	1	2
184	40	50	1	18	22	1	1	2	4	1	3	2000	667	0	0	0	0	0	0	0	0	0	3	18	3	3	0	0	0	0	0	0	0	1	1	1	1	2
185	20	25	1	20	0	1	4	3	4	2	5	5000	1000	0	0	0	1	0	0	0	0	1	0	.	.	.	.	.	.	.	0	0	0	1	1	1	1	2	1
186	42	45	1	17	25	1	1	1	4	2	6	6000	1000	0	0	0	0	0	0	0	0	0	2	20	2	2	0	0	0	0	2	0	0	1	1	1	1	2	2
187	19	25	1	16	3	1	3	3	4	1	3	7000	2333	0	0	0	0	0	0	0	0	0	2	17	1	1	0	1	1	0	0	0	0	1	1	1	1	1	2
188	19	22	1	18	1	1	4	3	4	1	3	8000	2667	0	0	0	0	0	0	1	0	1	1	19	0	0	0	1	1	0	0	0	0	1	1	1	1	1	2
189	22	30	1	19	3	1	1	3	4	1	3	9000	3000	0	0	0	0	0	0	0	0	0	1	20	1	1	0	0	0	0	0	0	0	1	1	1	1	1	2
190	33	51	1	12	21	1	2	2	4	2	6	4000	667	0	0	0	0	0	0	0	0	0	5	12	5	5	0	0	0	0	2	0	0	1	1	1	1	1	2
191	18	25	1	18	0	1	3	2	4	1	2	8000	4000	0	0	0	1	0	1	0	0	1	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
192	36	40	1	17	19	1	2	3	4	1	4	5000	1250	0	0	0	0	0	0	0	0	0	2	18	2	0	2	0	0	0	2	2	0	1	1	2	.	.	.
193	24	27	1	23	1	1	3	2	4	1	3	5000	1667	0	0	0	0	0	0	0	0	0	1	24	1	0	1	0	0	0	0	0	0	1	1	2	.	.	.
194	29	30	1	28	1	1	4	3	4	1	2	3000	1500	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	0	0	0	1	1	1	1	2	2
195	27	29	1	25	2	1	2	3	4	1	3	3000	1000	0	0	0	0	0	0	0	0	0	1	26	1	1	0	0	0	0	0	0	0	1	1	1	2	1
196	25	25	1	23	2	1	4	4	4	1	4	7000	1750	0	0	0	0	0	0	0	0	0	2	23	2	2	0	0	0	0	0	2	0	1	1	2	.	.	.
197	34	40	1	18	16	3	3	3	4	1	4	5000	1250	0	0	0	0	0	0	0	0	0	2	19	2	0	2	0	0	0	2	0	0	1	1	2	0	.	.
198	42	50	2	18	24	1	2	1	1	1	3	2000	667	0	0	0	0	0	0	0	0	0	3	21	3	3	0	0	0	0	2	0	0	1	1	1	2	1
199	18	21	1	17	1	1	4	3	4	1	3	2000	667	1	0	0	0	0	0	0	0	1	1	18	1	1	0	0	0	0	0	0	2	1	0	2	.	.	.
200	25	36	1	21	4	1	5	5	4	1	3	20000	6667	0	0	0	0	0	0	0	0	0	1	22	1	1	0	0	0	0	0	0	0	1	1	2	.	.	.
201	34	34	1	24	10	1	5	5	4	1	3	10000	3333	1	0	0	0	0	0	0	0	1	5	24	1	1	0	4	4	0	0	2	0	1	1	2	.	.	.
202	28	34	1	25	3	1	5	5	4	2	4	3000	750	0	0	0	1	0	0	0	0	1	1	26	1	1	0	0	0	0	0	0	0	1	1	2	.	.	.
203	28	31	1	25	3	1	3	3	4	1	2	5000	2500	1	0	0	0	0	0	0	0	1	0	.	.	.	.	.	.	.	0	0	0	1	0	2	.	.	.
204	32	34	1	18	14	1	3	3	4	1	5	5000	1000	0	0	0	0	0	0	0	0	0	4	22	3	2	1	1	1	0	2	0	0	1	1	2	.	.	.
205	23	30	1	22	1	3	5	4	4	1	3	20000	6667	1	0	0	0	0	0	0	0	1	1	23	1	1	0	0	0	0	0	0	2	1	1	2	.	.	.
206	22	35	1	18	4	1	3	3	4	2	6	11000	1833	0	0	0	0	0	0	0	0	0	1	21	1	1	0	0	0	0	0	0	3	1	1	2	.	.	.
207	42	52	1	24	18	1	3	3	1	1	3	3000	1000	0	0	0	0	0	0	0	0	0	2	33	1	1	0	1	1	0	0	1	0	1	1	3	1	1	1
208	31	36	1	22	9	1	3	4	4	1	4	6000	1500	0	0	0	0	0	0	0	0	0	2	24	2	2	0	0	0	0	2	0	0	1	1	1	1	1	1
209	25	28	1	23	2	1	3	1	1	1	3	5000	1667	1	0	0	0	0	0	0	0	1	1	24	1	1	0	0	0	0	0	0	2	1	0	2	.	.	.
210	34	42	1	29	5	1	3	3	1	1	4	10000	2500	0	0	0	0	0	0	0	0	0	2	29	2	2	0	0	0	0	2	0	0	1	1	2	.	.	.
211	27	31	1	19	8	1	4	3	1	2	4	10000	2500	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	0	0	3	1	1	2	.	.	.
212	26	32	1	19	7	1	4	3	4	2	9	15000	1667	1	0	0	0	0	0	0	0	1	2	19	2	2	0	0	0	0	2	2	0	1	1	1	1	1	2
213	27	29	1	24	3	1	4	4	4	2	9	15000	1667	0	0	0	0	0	0	0	0	0	1	26	1	0	1	0	0	0	0	0	3	1	1	2	.	.	.
214	29	37	1	20	9	1	3	3	4	1	4	5000	1250	0	0	0	1	0	0	0	0	1	2	20	2	2	0	0	0	0	2	2	0	1	0	1	1	1	2
215	29	36	1	21	8	1	3	2	3	1	4	6000	1500	1	0	0	0	0	0	0	0	1	2	22	2	2	0	0	0	0	2	0	0	1	0	1	1	2	1
216	28	35	1	19	9	1	4	5	4	1	3	5000	1667	0	0	0	0	0	0	0	0	0	1	19	1	1	0	0	0	0	0	1	3	1	1	1	1	2	1
217	24	31	1	18	6	2	2	3	4	1	4	10000	2500	0	0	0	0	0	0	0	0	0	3	18	2	2	0	1	1	0	2	0	0	1	1	2	.	.	.
218	29	35	1	19	10	2	3	3	4	1	4	6000	1500	0	0	0	0	0	0	0	0	0	2	21	2	0	2	0	0	0	2	0	0	1	1	1	1	2	1
219	32	36	1	23	9	3	3	3	4	1	4	4000	1000	1	0	0	0	0	0	0	0	1	2	23	2	0	2	0	0	0	2	2	0	1	1	1	1	1	2
220	35	41	1	21	14	3	3	3	4	1	4	6000	1500	0	0	0	0	0	0	0	0	0	2	21	2	1	1	0	0	0	2	0	0	1	1	2	.	.	.
221	40	43	1	22	18	1	3	3	4	1	4	10000	2500	0	0	0	0	0	0	0	0	0	3	23	2	2	0	1	1	0	2	3	0	1	1	2	.	.	.
222	32	36	1	18	14	1	2	5	1	1	4	10000	2500	0	0	0	0	0	0	0	0	0	3	18	2	2	0	1	1	0	2	0	0	1	1	2	.	.	.
223	22	28	1	21	1	1	4	4	4	2	5	30000	6000	0	0	0	1	0	0	0	0	1	1	22	1	0	1	0	0	0	0	0	3	1	1	2	.	.	.
224	35	45	1	19	16	1	3	2	4	2	5	4500	900	0	0	0	0	0	0	0	0	0	3	19	2	2	0	1	0	1	2	1	0	1	1	2	.	.	.
225	45	51	1	13	32	1	1	2	4	1	2	3000	1500	0	0	0	0	0	0	0	0	0	4	20	3	3	0	1	1	0	2	0	0	1	1	1	1	2	1
226	27	28	1	19	8	1	4	3	4	1	4	5000	1250	0	0	0	0	0	0	0	0	0	2	22	2	0	2	0	0	0	2	0	0	1	1	2	.	.	.
227	25	32	1	17	8	1	3	3	4	2	7	5000	714	1	0	0	0	0	0	0	0	1	3	20	3	3	0	0	0	0	0	2	0	1	0	1	1	1	2
228	26	38	1	18	8	1	2	2	4	1	5	6000	1200	0	0	0	0	0	0	0	0	0	3	21	3	3	0	0	0	0	2	0	0	1	1	2	.	.	.
229	42	55	1	12	30	1	2	2	4	2	6	6000	1000	0	0	0	0	0	0	0	0	0	3	15	3	3	0	0	0	0	2	0	0	1	1	1	1	1	2
230	40	56	2	18	22	1	1	3	4	1	2	5000	2500	1	0	0	0	0	0	1	1	1	1	18	1	1	0	0	0	0	2	2	0	1	0	2	.	.	.
231	25	28	1	17	8	1	3	3	3	1	2	5000	2500	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
232	26	30	1	19	7	1	4	5	4	1	4	8000	2000	0	0	0	0	0	0	0	0	0	2	20	2	1	1	0	0	0	2	3	0	1	1	2	.	.	.
233	34	35	1	23	11	1	3	2	1	1	4	6000	1500	0	0	0	0	0	0	0	0	0	2	23	2	0	2	0	0	0	2	0	0	1	1	2	.	.	.
234	23	27	1	22	1	1	4	2	4	1	3	8000	2667	0	0	0	1	0	1	0	0	1	1	22	1	0	1	0	0	0	0	0	2	1	1	2	.	.	.
235	20	28	1	18	2	1	3	1	4	2	4	3000	750	1	0	0	0	0	0	0	0	1	1	19	1	0	1	0	0	0	0	0	2	1	0	2	.	.	.
236	29	33	1	24	5	1	3	3	4	2	6	8000	1333	0	0	0	0	0	0	0	0	0	2	26	2	1	1	0	0	0	2	2	0	1	1	2	.	.	.

Sln	Page	Sage	Marst	Marage	Mardur	Rel	Paredu	Spedu	Occu	Famtyp	Nomem	Totinc	PCI	VD	GU	LAP	Painuri	Ingswel	Blis	Painsi	Spotsi	AnyRTI	Parity	Agefc	Nolb	Novd	Nocs	Noabor	Nospont	Noind	PS	Conteu	Contcur	toiletuse	Washpp	Napkin	Reuse	Washre	Dryre
237	29	32	1	18	11	2	3	2	1	2	5	12000	2400	0	0	0	0	0	0	0	0	0	2	20	2	2	0	0	0	0	2	2	0	1	1	2	.	.	.
238	26	30	1	15	11	2	2	2	4	1	4	9000	2250	1	0	0	0	0	0	0	0	1	2	16	2	2	0	0	0	0	2	2	0	1	0	3	1	1	2
239	27	34	1	19	8	1	3	4	4	1	4	8000	2000	0	0	0	0	0	0	0	0	0	3	21	2	0	2	1	1	0	0	0	3	1	1	2	.	.	.
240	37	47	1	18	19	1	2	3	4	2	6	6000	1000	1	0	0	0	0	0	0	0	1	2	18	2	2	0	0	0	0	2	3	0	1	0	1	1	1	2
241	42	50	1	17	25	1	3	2	4	1	2	4000	2000	0	0	0	0	0	0	0	0	0	2	16	2	2	0	0	0	0	2	0	0	1	1	2	.	.	.
242	32	35	1	19	13	1	2	1	4	1	5	5000	1000	0	0	1	0	0	0	0	0	1	3	20	3	3	0	0	0	0	2	2	0	1	0	1	1	1	2
243	29	35	1	15	14	1	1	2	4	1	5	4000	800	0	0	0	0	0	0	0	0	0	3	16	3	3	0	0	0	0	2	2	0	1	1	1	1	2	1
244	27	31	1	23	4	1	3	3	4	1	3	6000	2000	0	0	0	0	0	0	0	0	0	2	24	1	1	0	1	1	0	0	0	0	1	1	2	.	.	.
245	20	27	1	20	0	1	3	4	4	1	2	5000	2500	0	0	0	1	0	0	0	0	1	1	20	0	0	0	1	1	0	0	2	0	1	1	1	1	1	2
246	40	45	1	15	25	1	3	3	4	1	3	4000	1333	0	0	0	0	0	0	0	0	0	1	27	1	0	1	0	0	0	0	0	0	1	1	3	1	2	1
247	27	35	1	17	10	1	3	4	4	1	3	2000	667	1	0	0	0	0	0	1	0	1	1	20	1	1	0	0	0	0	0	0	2	1	0	1	1	1	2
248	35	42	1	23	12	1	3	3	3	1	3	2000	667	0	0	0	0	0	0	0	0	0	1	26	1	1	0	0	0	0	0	0	0	1	1	3	1	1	2
249	30	33	1	19	11	1	5	5	3	1	3	10000	3333	0	0	0	0	0	0	0	0	0	1	29	1	0	1	0	0	0	0	0	0	1	1	2	.	.	.
250	35	39	1	24	11	1	2	3	4	1	4	3000	750	0	0	0	0	0	0	0	0	0	2	24	2	2	0	0	0	0	2	0	0	1	1	1	1	2	1
251	21	23	1	21	0	1	3	3	4	2	4	3000	750	0	0	0	1	0	0	0	0	1	0	.	.	.	.	.	.	.	0	0	0	1	0	3	1	1	2
252	45	45	1	21	24	1	2	2	4	1	6	3000	500	0	0	0	0	0	0	0	0	0	4	22	4	4	0	0	0	0	2	0	0	1	1	1	1	1	2
253	19	26	1	16	3	1	3	4	4	1	4	2000	500	0	0	0	0	0	0	0	0	0	3	18	2	2	0	1	1	0	2	0	0	1	1	1	1	1	2
254	40	51	1	18	22	1	3	3	4	1	4	4000	1000	0	0	0	0	0	1	0	0	1	2	24	2	0	2	0	0	0	2	0	0	1	1	1	1	1	2
255	45	52	1	16	29	1	1	2	4	1	3	3000	1000	0	0	0	0	0	0	0	0	0	5	19	2	2	0	3	3	0	2	0	0	1	1	2	.	.	.
256	35	43	1	19	16	1	3	1	4	1	4	6000	1500	0	0	0	0	0	0	0	0	0	5	19	2	0	2	3	3	0	2	2	0	1	1	2	.	.	.
257	28	30	1	21	7	2	2	2	4	2	5	6000	1200	0	0	0	0	0	0	0	0	0	2	22	2	2	0	0	0	0	0	0	0	1	1	2	.	.	.
258	42	50	1	18	24	1	2	2	1	1	4	7000	1750	0	0	0	0	0	0	0	0	0	2	24	1	1	0	1	1	0	2	0	0	1	1	1	0	.	.
259	32	34	1	18	14	2	3	4	4	1	4	15000	3750	1	0	0	0	0	0	0	0	1	2	20	2	2	0	0	0	0	2	2	0	1	0	2	.	.	.
260	29	50	1	16	13	1	2	3	4	1	4	10000	2500	0	0	0	0	0	0	0	0	0	3	19	3	3	0	0	0	0	2	0	0	1	1	2	.	.	.
261	34	39	1	19	15	3	4	4	4	1	4	25000	6250	0	0	0	0	0	0	0	0	0	4	20	2	0	2	2	2	0	2	0	0	1	1	2	.	.	.
262	36	42	2	25	11	1	4	4	4	1	3	10000	3333	1	0	0	1	0	0	0	0	1	2	25	2	0	2	0	0	0	2	2	0	1	1	2	.	.	.
263	27	29	1	25	2	3	5	4	4	2	5	20000	4000	0	0	0	0	0	0	0	0	0	1	26	1	1	0	0	0	0	0	0	0	1	1	2	.	.	.
264	26	28	1	21	5	1	2	3	4	1	5	10000	2000	0	0	0	0	0	0	0	0	0	2	21	2	2	0	0	0	0	2	0	0	1	1	2	.	.	.
265	35	43	1	22	13	1	4	3	3	1	5	6000	1200	1	0	1	1	0	0	0	0	1	5	22	3	2	1	2	1	1	0	2	0	1	1	2	.	.	.
266	27	38	1	22	5	2	4	4	4	2	8	6000	750	1	0	0	0	0	0	0	0	1	1	24	1	1	0	0	0	0	0	0	0	1	1	2	.	.	.
267	35	41	2	25	10	1	5	3	4	1	3	25000	8333	0	0	0	0	0	0	0	0	0	2	25	2	2	0	0	0	0	2	2	0	1	1	2	.	.	.
268	33	35	1	27	6	1	5	5	3	1	3	40000	13333	1	0	0	0	0	0	0	0	1	2	27	1	1	0	1	1	0	0	2	0	1	1	2	.	.	.
269	23	25	1	22	1	1	3	3	4	2	4	30000	7500	0	0	0	0	0	0	0	0	0	1	22	1	0	1	0	0	0	0	0	0	1	1	3	1	1	1
270	29	33	1	24	5	1	2	3	2	2	5	6000	1200	1	0	1	0	0	0	0	0	1	2	24	1	1	0	1	0	1	0	2	0	1	0	2	.	.	.
271	35	40	1	19	16	1	2	3	3	1	4	8000	2000	0	0	0	0	0	0	0	0	0	3	19	2	2	0	1	1	0	2	0	0	1	1	1	1	1	1
272	38	46	1	28	10	1	5	5	1	1	3	25000	8333	0	0	0	0	0	0	0	0	0	4	28	1	0	1	3	3	0	2	2	0	1	1	2	.	.	.
273	38	40	1	18	20	1	1	2	2	1	7	7000	1000	1	0	1	1	0	0	0	0	1	7	18	6	6	0	1	0	1	2	0	0	1	0	1	0	.	.
274	40	48	2	17	23	2	4	4	4	2	9	10000	1111	1	0	0	0	0	0	0	0	1	1	19	1	1	0	0	0	0	0	0	0	1	1	3	1	1	1
275	45	48	1	25	20	1	4	5	3	1	4	24000	6000	0	0	0	0	0	0	0	0	0	4	25	2	2	0	2	2	0	0	0	0	1	1	2	.	.	.
276	32	44	1	21	11	1	4	5	3	2	4	40000	10000	0	0	0	0	0	0	0	0	0	2	24	1	1	0	1	1	0	0	0	0	1	1	2	.	.	.
277	24	30	1	21	3	1	5	5	4	1	3	6000	2000	0	0	0	0	0	0	0	0	0	1	23	1	0	1	0	0	0	0	0	0	1	1	2	.	.	.
278	25	30	1	17	8	1	5	5	4	1	4	20000	5000	0	0	0	0	0	0	0	0	0	3	19	2	2	0	1	0	1	0	1	0	1	1	2	.	.	.
279	32	41	1	21	11	1	5	4	3	1	3	35000	11666	0	0	0	0	0	0	0	0	0	1	22	1	0	1	0	0	0	0	0	3	1	1	2	.	.	.
280	21	25	1	19	2	1	4	5	4	2	5	7000	1400	0	0	0	0	0	0	0	0	0	1	20	1	1	0	0	0	0	0	0	2	1	1	2	.	.	.
281	30	34	1	26	4	1	5	5	4	1	3	10000	3333	0	0	0	0	0	0	0	0	0	2	28	1	0	1	1	1	0	0	3	0	1	1	2	.	.	.
282	23	30	1	23	0	1	3	3	4	2	17	10000	588	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
283	41	43	1	25	16	1	4	5	3	1	4	30000	7500	0	0	0	0	0	0	0	0	0	2	26	2	1	1	0	0	0	2	2	0	1	1	2	.	.	.
284	24	33	1	19	5	1	4	3	4	1	4	9000	2250	1	0	0	0	0	0	0	0	1	2	20	2	0	2	0	0	0	2	2	0	1	1	2	.	.	.
285	35	38	1	27	8	2	1	3	4	1	4	6000	1500	1	0	0	1	0	0	0	0	1	3	29	2	2	0	1	0	1	0	0	0	1	0	2	.	.	.
286	29	35	1	24	5	3	4	3	4	1	3	8000	2667	0	0	0	0	0	0	0	0	0	1	24	1	0	1	0	0	0	0	1	0	1	1	2	.	.	.
287	33	38	1	26	7	3	5	3	3	2	7	20000	2857	1	0	0	0	0	0	0	0	1	1	27	1	0	1	0	0	0	0	2	0	1	1	2	.	.	.
288	43	47	1	25	18	1	4	5	4	1	4	10000	2500	0	0	0	0	0	0	0	0	0	2	28	2	2	0	0	0	0	2	3	0	1	1	2	.	.	.
289	38	40	1	23	15	1	5	5	3	1	4	10000	2500	1	0	0	0	0	0	0	0	1	2	28	2	0	2	0	0	0	2	2	0	1	1	2	.	.	.
290	33	41	1	24	9	1	5	4	4	1	4	40000	10000	0	0	0	0	0	0	0	0	0	2	24	2	0	2	0	0	0	2	0	0	1	1	2	.	.	.
291	31	38	2	23	8	1	5	5	3	2	5	25000	5000	0	0	0	0	0	0	0	0	0	2	25	2	0	2	0	0	0	2	0	0	1	1	2	.	.	.
292	30	35	1	27	3	1	5	5	4	1	4	40000	10000	0	0	0	0	0	0	0	0	0	2	27	2	0	2	0	0	0	2	0	0	1	1	2	.	.	.
293	24	26	1	22	2	3	5	5	4	2	6	20000	3333	0	0	0	0	0	0	0	0	0	1	23	1	0	1	0	0	0	0	0	3	1	1	2	.	.	.
294	45	49	1	19	26	3	4	3	3	2	6	20000	3333	0	0	0	0	0	0	0	0	0	1	21	1	1	0	0	0	0	0	0	0	1	1	2	.	.	.
295	34	39	1	24	10	1	4	3	4	1	3	15000	5000	0	0	0	0	0	0	0	0	0	1	33	1	0	1	0	0	0	0	0	2	1	1	2	.	.	.
296	39	40	1	19	20	1	3	5	4	1	4	6000	1500	0	0	0	0	0	0	0	0	0	3	22	2	1	1	1	0	1	2	2	0	1	1	3	1	2	1

Sln	Page	Sage	Marst	Marage	Mardur	Rel	Paredu	Spedu	Occu	Famtyp	Nomem	Totinc	PCI	VD	GU	LAP	Painuri	Ingswel	Blis	Painsi	Spotsi	AnyRTI	Parity	Agefc	Nolb	Novd	Nocs	Noabor	Nospont	Noind	PS	Conteu	Contcur	toiletuse	Washpp	Napkin	Reuse	Washre	Dryre
297	35	36	2	23	12	1	5	5	4	1	3	25000	8333	1	0	0	0	0	1	0	0	1	2	23	2	2	0	0	0	0	2	2	0	1	1	2	.	.	.
298	30	36	1	25	5	1	5	5	4	1	2	15000	7500	0	0	0	0	0	0	0	0	0	3	25	1	1	0	2	2	0	0	0	0	1	1	2	.	.	.
299	34	42	1	21	13	1	4	4	3	2	5	10000	2000	0	0	0	0	0	0	0	0	0	2	25	2	2	0	0	0	0	2	3	0	1	1	3	1	1	2
300	28	31	1	25	3	2	5	5	3	2	5	20000	4000	0	0	0	0	0	0	0	0	0	1	26	1	1	0	0	0	0	0	0	0	1	1	3	1	1	2
301	36	37	1	23	13	1	4	4	4	1	4	10000	2500	1	0	0	1	0	0	0	0	1	2	24	2	0	2	0	0	0	2	2	0	1	1	2	.	.	.
302	36	37	1	25	11	1	5	5	3	1	4	15000	3750	0	0	0	0	0	0	0	0	0	2	25	2	2	0	0	0	0	2	2	0	1	1	2	.	.	.
303	27	34	1	25	2	1	5	4	4	2	4	25000	6250	0	0	0	0	0	0	0	0	0	1	26	1	1	0	0	0	0	0	0	3	1	1	2	.	.	.
304	41	52	1	24	17	1	5	5	3	1	4	40000	10000	0	0	0	0	0	0	0	0	0	2	27	2	2	0	0	0	0	2	0	0	1	1	2	.	.	.
305	24	30	1	20	4	1	5	5	4	1	3	30000	10000	1	0	0	0	0	0	0	0	1	1	21	1	0	1	0	0	0	0	0	2	1	1	2	.	.	.
306	30	35	1	24	6	1	3	3	4	2	5	15000	3000	1	0	0	0	0	0	0	0	1	2	24	2	1	1	0	0	0	2	2	0	1	1	2	.	.	.
307	38	40	1	38	0	1	5	5	4	1	2	7000	3500	1	0	0	0	0	0	0	0	1	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
308	27	32	1	24	3	1	5	5	3	1	3	25000	8333	0	0	0	0	0	0	0	0	0	1	25	1	0	1	0	0	0	0	0	3	1	1	2	.	.	.
309	30	38	1	25	5	1	5	5	3	1	4	20000	5000	0	0	0	0	0	0	0	0	0	2	26	2	2	0	0	0	0	2	0	0	1	1	2	.	.	.
310	34	37	2	24	10	1	5	5	4	2	5	60000	12000	0	0	0	1	0	0	0	0	1	2	26	2	0	2	0	0	0	2	2	0	1	1	2	.	.	.
311	24	28	1	23	1	1	5	4	4	2	8	25000	3125	0	0	0	0	0	0	0	0	0	1	23	1	0	1	0	0	0	0	0	0	1	1	2	.	.	.
312	30	33	1	19	11	1	5	5	3	1	4	25000	6250	0	0	0	0	0	0	0	0	0	2	19	2	2	0	0	0	0	2	0	0	1	1	2	.	.	.
313	28	38	1	20	8	1	3	3	4	1	4	7000	1750	0	0	0	0	0	0	0	0	0	2	21	2	2	0	0	0	0	2	0	0	1	1	2	.	.	.
314	21	28	1	19	2	1	4	3	4	2	6	10000	1667	0	0	0	0	0	0	1	0	1	1	20	1	1	0	0	0	0	0	0	2	1	1	2	.	.	.
315	27	34	1	17	10	1	3	3	4	1	4	20000	5000	1	0	0	1	0	0	0	0	1	3	19	2	2	0	1	0	1	2	2	0	1	1	2	.	.	.
316	36	37	1	26	10	1	5	5	4	1	3	50000	16667	0	0	0	0	0	0	0	0	0	1	35	1	0	1	0	0	0	0	0	1	1	1	2	.	.	.
317	42	52	1	23	19	1	5	3	3	1	4	25000	6250	0	0	0	0	0	0	0	0	0	2	31	2	2	0	0	0	0	0	0	0	1	1	2	.	.	.
318	25	32	1	24	1	3	5	3	3	2	6	20000	3333	0	0	0	0	0	0	0	0	0	1	25	1	0	1	0	0	0	0	0	3	1	1	2	.	.	.
319	28	30	1	26	2	1	5	5	3	2	5	50000	10000	1	0	0	0	0	0	0	0	1	1	27	1	0	1	0	0	0	0	0	2	1	1	2	.	.	.
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321	27	30	1	24	3	1	4	4	4	1	3	25000	8333	1	0	0	0	0	0	0	0	1	2	25	1	0	1	1	0	1	0	0	2	1	1	2	.	.	.
322	30	38	2	23	7	1	5	5	1	2	4	30000	7500	0	0	0	0	0	0	0	0	0	2	26	2	2	0	0	0	0	0	0	0	1	1	2	.	.	.
323	33	35	1	33	0	1	5	5	3	1	2	1E+05	50000	1	0	0	0	0	0	0	0	1	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
324	29	30	1	26	3	1	5	5	3	1	3	50000	16667	0	0	0	0	0	1	0	0	1	1	27	1	0	1	0	0	0	0	0	0	1	1	2	.	.	.
325	27	37	1	22	5	1	5	5	4	1	4	25000	6250	0	0	0	0	0	0	0	0	0	2	23	2	0	2	0	0	0	2	0	0	1	1	2	.	.	.
326	42	44	1	25	17	1	3	3	4	1	4	4000	1000	0	0	0	0	0	0	0	0	0	2	25	2	0	2	0	0	0	2	2	0	1	1	1	1	2	1
327	34	37	1	21	13	1	3	4	4	1	5	5000	1000	1	0	0	0	0	0	0	0	1	4	22	3	3	0	1	1	0	2	0	0	1	1	3	1	1	2
328	23	28	1	21	2	1	5	5	4	1	3	35000	11667	1	0	0	0	0	0	0	0	1	1	22	1	0	1	0	0	0	0	0	2	1	1	2	.	.	.
329	28	30	1	22	6	1	3	5	4	2	6	3000	500	0	0	0	0	0	0	0	0	0	3	23	3	2	1	0	0	0	2	3	0	1	1	2	.	.	.
330	33	43	1	21	12	1	3	1	4	1	4	4000	1000	0	0	0	0	0	0	0	0	0	4	22	2	2	0	2	2	0	2	0	0	1	1	3	1	1	1
331	29	35	1	21	8	1	5	5	4	2	6	17000	2833	0	0	0	0	0	0	0	0	0	3	21	2	2	0	1	1	0	2	3	0	1	1	2	.	.	.
332	35	32	1	26	9	1	5	5	3	2	5	20000	4000	0	0	0	0	0	0	0	0	0	2	26	2	0	2	0	0	0	2	0	0	1	1	2	.	.	.
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334	27	33	1	19	8	1	1	1	2	1	5	3000	600	1	0	0	1	0	0	0	0	1	4	19	3	3	0	1	0	1	0	0	3	1	0	1	1	1	2
335	29	33	1	26	3	1	5	5	3	1	3	80000	26667	0	0	0	0	0	0	0	0	0	1	27	1	0	1	0	0	0	0	0	2	1	1	2	.	.	.
336	45	55	1	15	30	1	3	3	4	1	3	10000	3333	0	0	0	0	0	0	0	0	0	1	30	1	1	0	0	0	0	2	0	0	1	1	3	1	2	1
337	37	40	1	23	14	1	3	5	4	1	4	8000	2000	1	0	0	0	0	0	0	0	1	4	29	2	0	2	2	2	0	2	0	0	1	1	2	.	.	.
338	32	37	1	28	4	1	5	5	4	1	3	35000	11667	0	0	0	0	0	0	0	0	0	3	29	1	1	0	2	1	1	0	0	3	1	1	2	.	.	.
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342	31	40	1	26	5	2	3	3	4	2	5	4000	800	1	0	0	0	0	0	0	0	1	2	27	2	2	0	0	0	0	0	2	0	1	0	1	1	1	1
343	32	37	2	17	15	1	2	4	2	1	3	3000	1000	0	0	0	0	0	0	0	0	0	2	18	2	2	0	0	0	0	2	0	0	1	1	2	.	.	.
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345	26	27	1	20	6	1	4	3	3	1	4	8000	2000	1	0	0	1	0	0	0	0	1	2	20	2	2	0	0	0	0	2	2	0	1	1	3	0	.	.
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348	28	33	1	23	5	1	3	4	4	1	4	5000	1250	0	0	0	0	0	0	0	0	0	2	24	2	0	2	1	1	0	0	0	3	1	1	1	1	1	1
349	40	43	1	28	12	2	5	4	3	1	4	11000	2750	0	0	0	0	0	0	0	0	0	3	29	2	2	0	1	1	0	0	0	0	1	1	2	.	.	.
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351	28	29	1	20	8	1	1	1	2	1	3	10000	3333	0	0	0	0	0	0	0	0	0	2	27	1	0	1	1	0	0	0	1	1	1	1	1	1	1	1
352	45	52	1	18	27	2	3	3	4	1	4	6000	1500	1	0	0	0	0	0	0	0	1	2	18	2	2	0	0	0	0	2	2	0	1	0	1	1	1	1
353	36	45	1	26	10	1	2	2	4	1	4	4000	1000	0	0	0	0	0	0	0	0	0	3	26	2	2	0	1	1	0	2	0	0	1	1	1	1	1	2
354	42	51	2	16	26	1	1	3	3	1	5	4000	800	0	0	0	0	0	0	0	0	0	7	16	6	6	0	1	1	0	0	0	0	1	1	1	1	1	1
355	31	37	1	18	13	1	3	3	3	1	5	4000	800	1	0	0	0	0	0	0	0	1	4	18	3	3	0	1	0	1	0	2	0	1	1	2	.	.	.
356	32	40	1	19	13	1	2	3	4	1	6	3000	500	0	0	0	0	0	0	0	0	0	4	19	4	4	0	0	0	0	0	0	3	1	1	1	1	1	1

Sln	Page	Sage	Marst	Marage	Mardur	Rel	Paredu	Spedu	Occu	Famtyp	Nomem	Totinc	PCI	VD	GU	LAP	Painuri	Ingswel	Blis	Painsi	Spotsi	AnyRTI	Parity	Agefc	Nolb	Novd	Nocs	Noabor	Nospont	Noind	PS	Conteu	Contcur	toiletuse	Washpp	Napkin	Reuse	Washre	Dryre
357	38	45	2	18	20	1	3	1	3	2	4	3000	750	0	0	0	0	0	0	0	0	0	3	18	3	3	0	0	0	0	0	0	0	1	1	1	1	2
358	40	45	1	18	22	1	1	2	3	1	5	4000	800	1	0	0	0	0	0	0	0	1	3	19	3	3	0	0	0	0	2	2	0	1	0	1	1	2
359	33	45	1	20	13	1	2	1	3	1	4	3000	750	1	0	0	1	0	0	0	0	1	3	20	2	2	0	1	1	0	2	2	0	1	0	1	1	2
360	31	36	2	19	12	1	2	1	3	2	4	6000	1500	0	0	0	0	0	0	0	0	0	2	20	2	2	0	0	0	0	0	2	0	1	1	2	.	.
361	30	35	1	20	10	1	5	3	4	1	5	6000	1200	0	0	0	0	0	0	0	0	0	3	22	3	3	0	0	0	0	2	0	0	1	1	2	.	.
362	35	42	1	25	10	1	3	3	3	1	4	12000	3000	1	0	0	0	0	0	0	0	1	3	25	2	2	0	0	0	0	0	0	2	1	0	2	.	.
363	25	35	1	21	4	1	3	2	4	1	3	3000	1000	0	0	0	0	0	0	0	0	0	2	21	1	1	0	1	1	0	0	0	0	1	1	3	1	2	2
364	23	28	1	20	3	1	3	3	4	1	4	12000	3000	0	0	0	0	0	0	0	0	0	3	20	3	3	0	0	0	0	0	0	0	1	1	2	.	.
365	45	49	1	17	28	1	2	3	4	1	5	4000	800	0	0	0	0	0	0	0	0	0	4	21	4	4	0	0	0	0	0	0	0	1	1	1	1	2
366	27	30	1	21	6	1	1	1	4	2	10	4000	400	0	0	0	0	0	1	0	0	1	1	24	1	1	0	0	0	0	0	0	0	1	1	1	1	2	1
367	22	26	1	20	2	2	3	3	4	2	5	7000	1400	1	0	0	0	0	0	0	0	1	1	21	1	1	0	0	0	0	0	0	2	1	0	2	.	.	.
368	21	24	1	20	1	1	3	3	4	2	5	6000	1200	1	0	0	0	0	0	0	0	1	0	.	.	.	.	.	.	.	0	0	0	1	0	3	1	1	2
369	22	30	1	19	3	1	4	3	4	2	6	9000	1500	1	0	0	0	0	0	0	0	1	1	21	1	1	0	0	0	0	0	2	0	1	1	2	.	.	.
370	30	39	1	27	3	2	2	3	4	1	3	4000	1333	0	0	0	0	0	0	0	0	0	1	29	1	0	1	0	0	0	0	0	0	1	1	3	1	2	1
371	37	47	1	22	15	1	3	2	4	1	5	9000	1800	1	0	0	0	0	0	0	0	1	4	25	3	3	0	1	1	0	2	2	0	1	0	2	.	.	.
372	22	32	1	22	0	1	4	3	4	2	5	4000	800	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
373	25	35	1	18	7	1	3	3	4	1	3	3000	1000	1	0	0	0	0	0	0	0	1	1	20	1	1	0	0	0	0	0	0	2	1	0	2	.	.	.
374	26	28	1	24	2	1	4	4	4	2	6	6000	1000	0	0	0	0	0	0	0	0	0	1	24	1	0	1	0	0	0	0	0	0	1	1	2	.	.	.
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377	23	29	1	22	1	1	4	4	4	2	5	9000	1800	0	0	0	0	0	0	0	0	0	1	23	1	0	1	0	0	0	0	0	0	1	1	2	.	.	.
378	24	27	1	24	0	1	4	3	4	1	2	3500	1750	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
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381	24	30	1	23	1	1	5	2	4	2	5	20000	4000	1	0	0	0	0	0	0	0	1	1	23	1	1	0	0	0	0	0	0	2	1	1	3	1	1	2
382	21	25	1	15	6	3	3	2	4	1	3	5000	1667	0	0	0	0	0	0	0	0	0	1	19	1	1	0	0	0	0	0	0	3	1	1	3	1	1	2
383	30	37	1	22	8	1	4	3	4	2	5	5000	1000	0	0	0	0	0	0	0	0	0	2	22	1	1	0	1	0	1	0	0	3	1	1	2	.	.	.
384	25	26	1	22	3	1	2	4	3	1	3	8000	2667	0	0	0	0	0	0	0	0	0	1	24	1	1	0	0	0	0	0	0	0	1	1	2	.	.	.
385	23	25	1	22	1	1	5	3	4	1	3	8000	2667	0	0	0	0	0	1	0	0	1	1	22	1	0	1	0	0	0	0	0	0	1	1	2	.	.	.
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387	27	31	1	21	6	1	4	3	4	2	5	7000	1400	1	0	0	0	0	0	0	0	1	3	22	3	3	0	0	0	0	0	2	0	1	1	2	.	.	.
388	32	40	1	25	7	1	3	3	4	1	4	7000	1750	0	0	0	0	0	0	0	0	0	3	25	2	0	2	1	1	0	2	0	0	1	1	2	.	.	.
389	20	26	1	18	2	1	3	1	4	1	3	3000	1000	1	0	0	0	0	0	0	0	1	2	18	2	2	0	0	0	0	0	0	2	1	0	2	.	.	.
390	20	27	1	19	1	1	3	3	4	1	3	10000	3333	0	0	0	0	0	0	0	0	0	1	19	1	1	0	0	0	0	0	0	0	1	1	2	.	.	.
391	22	28	1	19	3	1	4	4	4	2	8	10000	1250	0	0	0	0	0	0	0	0	0	2	20	2	2	0	0	0	0	2	0	0	1	1	2	.	.	.
392	32	32	1	26	6	1	5	5	3	2	5	50000	10000	0	0	0	0	0	0	0	0	0	2	29	2	0	2	0	0	0	0	0	0	1	1	2	.	.	.
393	20	30	1	19	1	1	3	3	4	1	3	15000	5000	1	0	0	0	0	0	0	0	1	1	19	1	1	0	0	0	0	0	0	2	1	0	2	.	.	.
394	24	28	1	23	1	1	4	3	3	1	2	10000	5000	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
395	30	38	1	25	5	1	1	2	4	1	4	6000	1500	0	0	0	0	0	0	0	0	0	3	25	2	0	2	1	1	0	2	0	0	1	1	3	1	2	1
396	33	43	1	16	17	1	2	3	1	1	6	6000	1000	0	0	0	0	0	0	0	0	0	6	17	4	4	0	2	2	0	2	2	0	1	1	3	1	2	1
397	20	26	1	18	2	1	3	4	4	2	5	3000	600	0	0	0	0	0	0	0	0	0	2	18	2	0	2	0	0	0	0	0	0	1	1	2	.	.	.
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399	21	26	1	19	2	1	3	3	4	2	5	4000	800	0	0	0	0	0	0	0	0	0	2	19	2	2	0	0	0	0	0	0	0	1	1	2	.	.	.
400	25	30	1	21	4	1	3	4	4	2	6	6000	1000	0	0	0	0	0	0	0	0	0	2	22	2	2	0	0	0	0	2	0	0	1	1	2	.	.	.
401	30	35	2	20	10	1	3	3	1	1	3	2500	833	0	0	0	0	0	0	0	0	0	2	21	2	2	0	0	0	0	0	2	0	1	1	1	1	1	1
402	28	34	1	20	8	1	2	2	4	1	4	4000	1000	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
403	24	34	1	22	2	1	1	2	4	1	5	4000	800	0	0	0	0	0	0	0	0	0	1	22	1	0	1	0	0	0	0	0	0	1	1	3	1	2	2
404	22	28	1	19	3	1	3	3	4	2	4	6000	1500	0	0	0	0	0	0	0	0	0	2	19	1	0	1	1	1	0	0	0	0	1	1	2	.	.	.
405	35	40	1	19	16	1	1	3	4	1	4	2000	500	0	0	0	0	0	0	1	1	1	2	30	2	2	0	0	0	0	0	2	0	1	1	3	1	1	2
406	25	45	1	22	3	1	2	3	4	2	4	5000	1250	1	0	0	0	0	0	0	0	1	2	23	2	2	0	0	0	0	2	2	0	1	0	1	1	1	2
407	25	30	1	22	3	1	2	3	4	1	4	5000	1250	0	0	0	0	0	0	0	0	0	2	22	2	0	2	0	0	0	2	0	0	1	1	2	.	.	.
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409	24	28	1	20	4	2	3	2	4	1	4	5000	1250	0	0	0	0	0	0	0	0	0	2	21	2	2	0	0	0	0	2	0	0	1	1	3	1	2	1
410	19	21	1	19	0	1	3	2	4	2	10	4000	400	1	0	0	0	0	1	0	0	1	0	.	.	.	.	.	.	.	0	0	0	1	1	3	1	1	2
411	25	30	1	21	4	1	5	4	4	2	6	7000	1167	0	0	0	0	0	0	0	0	0	2	21	2	1	1	0	0	0	2	0	0	1	1	2	.	.	.
412	23	28	1	20	3	1	3	4	4	1	4	6000	1500	1	0	0	0	0	0	0	0	1	2	21	2	2	0	0	0	0	2	2	0	1	1	3	1	1	2
413	37	44	1	25	12	1	3	3	4	1	4	12000	3000	0	0	0	0	0	0	0	0	0	2	35	2	2	0	0	0	0	2	0	0	1	1	2	.	.	.
414	22	29	1	18	4	2	3	3	4	2	7	8000	1143	0	0	0	0	0	0	0	0	0	3	18	2	1	1	1	1	0	2	0	0	1	1	3	1	1	1
415	28	36	1	25	3	1	3	4	4	1	4	5000	1250	0	0	0	0	0	0	0	0	0	2	26	2	2	0	0	0	0	2	0	0	1	1	3	1	2	2
416	30	35	1	25	5	1	2	1	3	1	5	3000	600	0	0	0	0	0	0	0	0	0	2	27	2	0	2	0	0	0	2	0	0	1	1	2	.	.	.

Sln	Page	Sage	Marst	Marage	Mardur	Rel	Paredu	Spedu	Occu	Famtyp	Nomem	Totinc	PCI	VD	GU	LAP	Painuri	Ingswel	Blis	Painsi	Spotsi	AnyRTI	Parity	Agefc	Nolb	Novd	Nocs	Noabor	Nospont	Noind	PS	Conteu	Contcur	toiletuse	Washpp	Napkin	Reuse	Washre	Dryre
417	25	30	1	20	5	2	3	3	4	1	4	3000	750	1	0	0	0	0	0	0	0	1	2	21	2	2	0	0	0	0	2	2	0	1	0	2	.	.	.
418	24	29	1	20	4	1	3	5	4	1	4	7000	1750	0	0	0	0	0	0	0	0	0	2	20	2	1	1	0	0	0	0	0	0	1	1	2	.	.	.
419	24	31	1	21	3	1	4	3	4	1	4	9000	2250	0	0	0	0	0	0	0	0	0	2	22	2	2	0	0	0	0	2	0	0	1	1	2	.	.	.
420	32	35	1	26	6	1	3	3	4	1	4	4000	1000	1	0	0	0	0	0	0	0	1	2	29	2	2	0	0	0	0	0	2	0	1	1	2	.	.	.
421	22	30	1	21	1	1	3	3	4	2	4	3000	750	0	0	0	0	0	0	0	0	0	1	21	1	1	0	0	0	0	0	0	3	1	1	2	.	.	.
422	25	30	1	23	2	1	4	3	4	2	9	6000	667	0	0	0	0	0	0	0	0	0	2	23	2	2	0	0	0	0	2	0	0	1	1	2	.	.	.
423	23	28	1	20	3	1	2	2	4	2	5	5000	1000	0	0	0	0	0	0	0	0	0	2	21	2	2	0	0	0	0	2	0	0	1	1	3	1	1	1
424	27	30	1	21	6	3	3	4	4	1	3	8000	2667	1	0	0	0	0	0	0	0	1	1	22	1	1	0	0	0	0	0	2	0	1	1	2	.	.	.
425	25	30	1	21	4	1	5	5	3	2	5	10000	2000	0	0	0	0	0	0	0	0	0	1	23	1	0	1	0	0	0	0	2	0	1	1	2	.	.	.
426	21	30	1	20	1	1	4	2	4	2	4	5000	1250	0	0	0	0	0	0	0	0	0	1	20	1	1	0	0	0	0	0	0	0	1	1	2	.	.	.
427	36	50	2	18	18	1	3	2	4	2	4	5000	1250	0	0	0	0	0	0	0	0	0	2	18	2	2	0	0	0	0	2	2	0	1	1	2	.	.	.
428	24	31	1	18	6	1	3	3	4	1	4	3000	750	0	0	0	0	0	0	0	0	0	3	20	2	0	2	1	1	0	2	3	0	1	1	2	.	.	.
429	29	30	1	24	5	1	1	4	4	1	5	4000	800	0	0	0	0	0	0	0	0	0	3	25	3	3	0	0	0	0	2	3	0	1	1	1	1	2	1
430	27	29	1	27	0	3	5	5	3	1	2	15000	7500	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
431	31	31	1	29	2	3	5	5	3	1	3	5000	1667	0	0	0	0	0	0	0	0	0	1	29	1	0	1	0	0	0	0	0	3	1	1	2	.	.	.
432	21	24	1	20	1	1	4	3	4	2	8	20000	2500	0	0	0	0	0	1	0	0	1	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
433	20	22	1	19	1	1	3	3	4	2	6	4000	667	0	0	0	0	0	0	0	0	0	1	19	1	1	0	0	0	0	0	0	0	1	1	3	1	1	2
434	23	25	1	19	4	2	3	3	4	1	4	6000	1500	0	0	0	0	0	0	0	0	0	1	22	1	1	0	0	0	0	0	0	1	1	1	1	1	2	1
435	26	33	1	24	2	1	3	3	4	1	3	5000	1667	0	0	0	0	0	0	1	1	1	1	25	1	1	0	0	0	0	0	0	2	1	1	2	.	.	.
436	29	30	1	25	4	1	4	4	4	1	4	5000	1250	0	0	0	0	0	0	0	0	0	2	27	2	2	0	0	0	0	2	0	0	1	1	2	.	.	.
437	20	23	1	19	1	1	3	2	4	2	11	4000	364	1	0	0	0	0	0	0	0	1	1	19	1	1	0	0	0	0	0	0	2	1	0	3	1	1	2
438	21	25	1	18	3	1	3	3	2	2	6	4000	667	0	0	0	0	0	0	0	0	0	2	19	2	0	2	0	0	0	2	3	0	1	1	2	.	.	.
439	31	38	1	24	7	1	3	3	4	2	5	6000	1200	0	0	0	0	0	0	0	0	0	3	25	2	2	0	1	1	0	2	1	0	1	1	2	.	.	.
440	23	32	1	18	5	1	5	5	4	1	3	6000	2000	0	0	0	0	0	0	0	0	0	1	19	1	1	0	0	0	0	0	0	0	1	1	2	.	.	.
441	24	30	1	21	3	1	3	3	4	1	3	6000	2000	0	0	0	0	0	0	0	0	0	2	21	1	0	1	1	1	0	0	3	3	1	1	1	1	2	1
442	24	30	1	20	4	1	2	2	4	2	4	4000	1000	0	0	0	0	0	0	0	0	0	2	21	2	2	0	0	0	0	0	0	0	1	1	2	.	.	.
443	29	33	1	23	6	1	3	4	4	1	4	4000	1000	0	0	0	0	0	0	0	0	0	2	25	2	0	2	0	0	0	0	0	3	1	1	2	.	.	.
444	20	28	1	18	2	1	3	3	3	1	3	12000	4000	0	0	0	0	0	0	1	0	1	1	19	1	0	1	0	0	0	0	2	2	1	1	2	.	.	.
445	24	26	1	22	2	2	2	2	4	1	4	4000	1000	0	0	0	0	0	0	0	0	0	1	23	1	1	0	0	0	0	0	0	3	1	1	2	.	.	.
446	27	31	2	23	4	1	4	3	4	1	6	7000	1167	0	0	0	0	0	0	0	0	0	2	24	2	0	2	0	0	0	2	2	0	1	1	2	.	.	.
447	22	24	1	20	2	1	1	2	4	2	6	7000	1167	0	0	0	0	0	0	0	0	0	2	20	2	2	0	0	0	0	2	0	0	1	1	2	.	.	.
448	21	25	1	20	1	1	4	3	4	2	6	4000	667	0	0	0	1	0	0	0	0	1	1	20	1	1	0	0	0	0	0	0	2	1	0	2	.	.	.
449	22	28	1	20	2	1	4	3	4	2	6	3000	500	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
450	20	29	1	19	1	2	3	4	4	2	5	4000	800	0	0	0	0	0	0	0	0	0	1	19	1	1	0	0	0	0	0	0	0	1	1	2	.	.	.
451	28	32	1	19	9	1	3	3	4	1	4	5000	1250	0	0	0	0	0	1	0	0	1	3	20	2	2	0	1	1	0	0	0	0	1	1	1	1	1	1
452	27	32	1	22	5	1	3	3	4	1	4	4000	1000	0	0	0	0	0	0	0	0	0	2	22	2	0	2	0	0	0	2	0	0	1	1	2	.	.	.
453	23	30	1	23	0	1	3	3	4	1	2	4000	2000	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
454	22	25	1	18	4	1	3	3	4	1	3	8000	2667	0	0	0	0	0	0	0	0	0	1	21	1	0	1	0	0	0	0	0	0	1	1	2	.	.	.
455	28	31	1	27	1	1	5	3	4	2	5	7000	1400	1	0	0	0	0	0	0	0	1	1	27	1	1	0	0	0	0	0	0	2	1	0	3	1	1	2
456	27	35	2	24	3	1	3	3	4	2	11	10000	909	0	0	0	0	0	0	0	0	0	1	26	1	0	1	0	0	0	0	0	0	1	1	2	.	.	.
457	22	27	1	21	1	1	4	3	4	2	10	5000	500	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0	1	1	2	.	.	.
458	26	36	1	21	5	1	3	4	4	1	4	5000	1250	0	0	0	0	0	0	0	0	0	2	22	2	0	2	0	0	0	2	0	0	1	1	2	.	.	.
459	26	33	1	22	4	1	4	5	4	1	4	7000	1750	0	0	0	0	0	0	0	0	0	2	23	2	0	2	0	0	0	0	2	0	1	1	2	.	.	.
460	22	30	1	21	1	2	4	3	4	2	8	15000	1875	0	0	0	0	0	0	0	0	0	1	21	1	0	1	0	0	0	0	0	0	1	1	2	.	.	.
461	27	32	1	25	2	1	3	3	1	2	5	6000	1200	0	0	0	0	0	0	0	0	0	1	25	1	0	1	0	0	0	0	0	0	1	1	2	.	.	.
462	20	27	1	19	1	1	3	4	4	2	5	7000	1400	1	0	0	0	0	0	0	0	1	1	19	1	1	0	0	0	0	0	0	2	1	0	2	.	.	.
463	40	45	1	18	22	1	2	3	4	2	6	4000	667	0	0	1	0	0	0	0	0	1	3	20	3	3	0	0	0	0	2	1	0	1	1	1	1	1	2
464	31	36	1	17	14	1	2	1	2	1	5	9000	1800	0	0	0	0	0	0	0	0	0	3	18	3	3	0	0	0	0	2	0	0	1	1	1	1	2	1
465	22	25	1	20	2	1	2	2	4	1	4	5000	1250	1	0	0	0	0	0	0	0	1	3	20	2	2	0	1	0	1	0	2	0	1	0	1	1	1	2
466	40	42	1	29	11	1	2	3	4	1	4	5000	1250	1	0	0	0	0	0	0	0	1	2	30	2	0	2	0	0	0	2	2	0	1	0	1	1	1	2
467	23	26	1	20	3	1	4	3	4	1	4	6000	1500	0	0	0	0	0	0	0	0	0	2	20	2	2	0	0	0	0	0	0	0	1	1	2	.	.	.
468	22	31	1	20	2	1	3	1	4	1	4	7000	1750	0	0	0	1	0	0	0	0	1	2	20	2	2	0	0	0	0	2	2	0	1	1	2	.	.	.
469	24	30	1	18	6	1	2	2	4	2	5	8000	1600	0	0	0	0	0	0	0	0	0	1	23	1	0	1	0	0	0	0	0	3	1	1	2	.	.	.
470	22	30	1	21	1	1	3	3	4	2	5	5000	1000	0	0	0	0	0	0	0	0	0	1	21	1	1	0	0	0	0	0	0	3	1	1	2	.	.	.
471	25	28	1	23	2	1	3	3	4	2	6	4000	667	1	0	0	0	0	0	0	0	1	1	24	1	1	0	0	0	0	0	0	2	1	0	2	.	.	.
472	20	26	1	18	2	1	4	3	4	1	3	6000	2000	1	0	0	0	0	0	0	0	1	1	18	1	1	0	0	0	0	0	0	2	1	1	2	.	.	.
473	25	26	1	24	1	2	4	3	3	2	6	10000	1667	0	0	0	0	0	0	0	0	0	1	24	1	0	1	0	0	0	0	0	3	1	1	2	.	.	.
474	27	36	1	21	6	3	3	5	4	1	4	20000	5000	0	0	0	0	0	0	0	0	0	2	21	2	2	0	0	0	0	2	1	0	1	1	2	.	.	.
475	28	29	1	25	3	1	5	5	4	2	6	4000	667	0	0	0	0	0	0	0	0	0	3	25	1	1	0	2	2	0	0	0	3	1	1	2	.	.	.
476	22	28	1	21	1	1	5	1	4	2	5	3000	600	0	0	0	0	0	0	0	0	0	1	21	1	1	0	0	0	0	0	0	3	1	1	2	.	.	.

Sln	Page	Sage	Marst	Marage	Mardur	Rel	Paredu	Spedu	Occu	Famtyp	Nomem	Totinc	PCI	VD	GU	LAP	Painuri	Ingswel	Blis	Painsi	Spotsi	AnyRTI	Parity	Agefc	Nolb	Novd	Nocs	Noabor	Nospont	Noind	PS	Conteu	Contcur	toiletuse	Washpp	Napkin	Reuse	Washre	Dryre
477	25	31	1	20	5	1	3	4	4	1	4	8500	2125	0	0	0	0	0	0	0	0	0	3	20	2	2	0	1	1	0	2	1	0	1	1	2	.	.	.
478	35	45	1	27	8	2	3	4	4	1	4	4000	1000	0	0	0	0	0	0	0	0	0	2	27	2	2	0	0	0	0	0	2	3	1	1	1	1	1	2
479	21	23	1	20	1	1	3	3	4	2	6	9000	1500	0	0	0	0	0	0	0	0	0	1	20	1	0	1	0	0	0	0	0	0	1	1	1	1	2	1
480	24	28	1	20	4	1	3	2	4	2	7	4000	571	1	0	0	0	0	0	0	0	1	2	21	2	2	0	0	0	0	2	2	0	1	0	2	.	.	.
481	22	28	1	21	1	1	5	3	4	2	4	5000	1250	1	1	0	0	0	0	0	0	1	1	21	1	1	0	0	0	0	0	2	1	1	2	.	.	.
482	26	33	1	23	3	1	4	3	4	2	5	10000	2000	0	0	0	0	0	0	0	0	0	1	23	2	2	0	0	0	0	0	3	1	1	2	.	.	.
483	24	30	1	20	4	1	3	4	4	1	4	10000	2500	0	0	0	0	0	0	0	0	0	2	20	2	2	0	0	0	0	2	0	1	1	2	.	.	.
484	23	30	1	19	4	1	3	2	4	1	6	4000	667	0	0	0	0	0	0	0	0	0	1	22	1	1	0	0	0	0	0	1	1	1	1	1	2	1
485	25	30	1	22	3	1	3	3	4	2	10	6000	600	0	0	0	0	0	0	0	0	0	1	23	1	0	1	0	0	0	0	0	3	1	1	2	.	.	.
486	23	28	1	22	1	1	5	3	4	2	7	10000	1428	0	0	0	0	0	0	0	0	0	1	22	1	1	0	0	0	0	0	0	3	1	1	2	.	.	.
487	26	30	1	26	0	1	3	2	4	2	7	7000	1000	0	0	0	1	0	1	0	0	1	0	.	.	.	.	.	.	.	0	0	0	1	0	2	.	.	.
488	29	32	1	24	5	1	4	2	4	2	7	5000	714	0	0	0	0	0	0	0	0	0	3	24	3	0	3	0	0	0	2	2	0	1	1	3	1	1	1
489	24	45	1	20	4	1	2	3	4	1	5	5000	1000	0	0	0	0	0	0	0	0	0	3	20	3	3	0	0	0	0	2	2	0	1	1	2	.	.	.
490	23	28	1	20	3	1	4	3	4	2	5	6000	1200	0	0	0	0	0	0	0	0	0	1	20	1	1	0	0	0	0	0	0	3	1	1	2	.	.	.
491	24	25	1	22	2	1	3	3	4	2	6	6000	1000	0	0	0	0	0	0	0	0	0	1	23	1	1	0	0	0	0	0	0	0	1	1	2	.	.	.
492	22	35	1	19	3	1	3	3	4	1	4	3600	900	0	0	0	0	0	0	0	0	0	3	19	2	2	0	1	1	0	2	0	0	1	1	3	1	2	1
493	26	29	1	23	3	1	3	3	4	2	12	5000	417	0	0	0	0	0	0	0	0	0	2	24	2	2	0	0	0	0	0	0	0	1	1	3	1	2	1
494	20	26	1	18	2	3	3	3	4	1	3	2000	667	0	0	0	0	0	0	0	0	0	1	18	1	1	0	0	0	0	0	0	3	1	1	2	.	.	
495	35	45	1	13	22	1	1	1	4	1	3	2000	667	0	0	1	0	0	0	0	0	1	3	13	2	2	0	1	1	0	2	2	0	1	0	1	1	1	2
496	26	29	1	21	5	1	4	4	4	2	6	4000	667	0	0	0	0	0	0	0	0	0	2	24	2	0	2	0	0	0	2	0	0	1	1	3	1	1	1
497	26	28	1	18	8	3	3	2	4	1	3	8000	2667	1	0	0	0	0	0	0	0	1	2	24	1	0	1	1	1	0	0	0	2	1	0	1	1	1	2
498	30	33	1	26	4	3	1	2	4	1	4	3000	750	0	0	0	0	0	0	0	0	0	2	26	2	2	0	0	0	0	2	0	0	1	1	1	1	1	1
499	24	27	1	21	3	1	5	3	4	1	4	6000	1500	0	0	0	0	0	0	0	0	0	2	21	2	2	0	0	0	0	2	0	0	1	1	2	.	.	.
500	23	33	1	22	1	1	3	3	4	2	6	12000	2000	0	0	0	0	0	0	0	0	0	2	22	1	1	0	1	1	0	0	0	0	1	1	2	.	.	.
501	32	38	1	18	14	1	3	3	4	1	3	3000	1000	1	0	0	0	0	0	0	0	1	2	25	1	0	1	1	1	0	0	2	0	1	0	2	.	.	.
502	19	21	1	18	1	1	4	3	4	2	9	10000	1111	0	0	0	0	0	0	0	0	0	1	18	1	1	0	0	0	0	0	0	3	1	1	2	.	.	
503	22	28	1	20	2	1	3	4	4	2	6	5000	833	0	0	0	0	0	0	0	0	0	2	20	2	0	2	0	0	0	2	0	0	1	1	2	.	.	
504	31	37	1	20	11	1	3	3	4	2	6	4000	667	0	0	0	0	0	0	0	0	0	2	21	2	0	2	0	0	0	2	0	0	1	1	1	1	2	1
505	33	35	1	23	10	1	3	4	4	1	5	5000	1000	0	0	0	1	0	0	0	0	1	4	25	3	3	0	1	1	0	0	2	0	1	1	1	1	1	2
506	26	30	1	22	4	2	3	1	4	1	5	3000	600	1	0	0	0	0	0	0	0	1	2	23	2	0	2	0	0	0	2	2	0	1	0	2	.	.	.
507	30	37	1	26	4	1	4	3	4	1	4	6500	1625	0	0	0	0	0	0	0	0	0	2	26	2	2	0	0	0	0	2	0	0	1	1	1	1	1	1
508	25	26	1	23	2	1	5	5	3	1	3	3500	1167	0	0	0	0	0	0	0	0	0	1	23	1	0	1	0	0	0	0	0	1	1	1	2	.	.	
509	23	29	1	22	1	1	5	3	4	2	5	10000	2000	1	0	0	0	0	0	0	0	1	1	22	1	0	1	0	0	0	0	0	3	1	1	3	1	1	2
510	24	29	1	21	3	1	5	5	4	2	6	14000	2333	0	0	0	0	0	0	0	0	0	1	23	1	0	1	0	0	0	0	3	0	1	1	2	.	.	
511	24	29	1	21	3	1	4	5	4	1	4	8000	2000	0	0	0	1	0	0	0	0	1	3	21	2	2	0	1	1	0	2	2	0	1	1	2	.	.	
512	25	30	1	23	2	1	5	4	3	2	6	9000	1500	0	0	0	0	0	0	0	0	0	1	24	1	1	0	0	0	0	0	0	3	1	1	2	.	.	.
513	26	26	1	25	1	1	3	3	4	2	4	3000	750	0	0	0	0	0	0	0	0	0	1	25	1	1	0	0	0	0	0	0	0	1	1	2	.	.	.
514	23	25	2	22	1	1	4	2	4	1	5	5000	1000	0	0	0	0	0	0	0	0	0	1	22	1	0	1	0	0	0	0	0	3	1	1	2	.	.	.
515	28	32	2	27	1	1	5	5	4	1	3	10000	3333	0	0	0	0	0	0	0	0	0	1	27	1	0	1	0	0	0	0	0	0	1	1	2	.	.	
516	31	33	1	29	2	2	5	3	4	2	7	3000	428	0	0	0	0	0	0	0	0	0	1	29	1	0	1	0	0	0	0	0	0	1	1	1	1	1	1
517	26	28	1	19	7	1	4	3	4	1	4	6000	1500	0	0	0	0	0	0	0	0	0	2	22	2	2	0	0	0	0	2	0	0	1	1	1	1	1	2
518	24	30	1	23	1	2	4	3	4	2	6	5500	917	0	0	0	0	0	0	0	0	0	1	23	1	0	1	0	0	0	0	0	3	1	1	1	1	2	1
519	24	28	1	22	2	1	3	4	4	2	10	6000	600	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0	1	1	1	1	2	1
520	25	30	1	20	5	1	2	2	1	1	4	4000	1000	1	0	0	0	0	0	0	0	1	2	22	2	2	0	0	0	0	0	2	1	0	1	1	1	2

INSTITUTIONAL ETHICS COMMITTEE
MADRAS MEDICAL COLLEGE, CHENNAI -3

Telephone No: 044 25305301
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CERTIFICATE OF APPROVAL

The Institutional Ethics committee of Madras Medical College, reviewed and discussed your application for approval of the proposal entitled "A cross sectional study on the prevalence of reproductive tract infections based on syndromic approach among married women aged 18 to 45 years in a rural area of Kancheepuram District, Tamilnadu, 2011" No. 13082011

The following members of Ethics Committee were present in the meeting held on 16.08.2011 conducted at Madras Medical College, Chennai -3.

1.	Prof. S.K. Rajan. MD	-- Chairperson
2.	Dr. V. Kanagasabai MD Dean, Madras Medical College, Chennai -3	-- Deputy Chairman
3.	Pro. A. Sundaram MD Vice Principal, Madras Medical College, Ch -3	-- Member Secretary
4.	Prof. R. Sathianathan MD	-- Member
5.	Prof. R. Nandhini MD Director, Institute of Pharmacology ,MMC, Ch-3	-- Member
6.	Prof. C. Rajendiran, MD Director , Inst. Of Internal Medicine, MMC, Ch-3	-- Member
7.	Thiru. A. Ulaganathan Administrative Officer, MMC, Ch-3	--- Layperson
8.	Thiru. S. Govindsamy. BA BL	-- Lawyer
9.	Tmt. Arnold soulina MA	-- Social Scientist

We approve the proposal to be conducted in its presented form.

Sd/ chairman & Other Members

The Institutional Ethics Committee expects to be informed about the progress of the study, and SAE occurring in the course of the study, any changes in the protocol and patients information / informed consent and asks to be provided a copy of the final report.

Member Secretary, Ethics Committee

A CROSS-SECTIONAL STUDY ON PREVALENCE OF REPRODUCTIVE TRACT INFECTIONS BASED ON SYNDROMIC APPROACH AMONG MARRIED WOMEN AGED 18 TO 45 YEARS IN A RURAL AREA OF KANCHEEPURAM DISTRICT, TAMIL NADU, 2011

ABSTRACT

Introduction:

Reproductive tract infections (RTIs) including sexually transmitted infections (STIs) are a major cause of morbidity among women of reproductive age group worldwide. Women of reproductive age group (15-45 years) constitute 22.2% of the population in India. Any morbidity in this group results in a huge burden on the socioeconomic and health status of the community. Country wide data indicate a higher prevalence of RTIs in rural areas compared to urban areas.

Objectives:

This study was conducted to find out the Prevalence of Reproductive tract Infections among married women of age group, 18 to 45 years in a rural area of Kancheepuram District, Tamil Nadu and to find out if there is any association between sociodemographic, obstetric factors, contraceptive and menstrual hygiene practices and Reproductive tract infections.

Methodology:

This community based, cross sectional study was conducted among married women aged 18 – 45 years in Karanai Puducheri village Panchayat, Kancheepuram District between March to November 2011. A sample size of 525 was derived based on previous prevalence. The participants were chosen by simple random sampling method. The prevalence was estimated based on experience of symptoms of RTI in the past 1 year using a standardized, semi-structured questionnaire in Tamil. Chi-square test and Fisher's Exact test were used for statistical analysis.

Results:

A total of 520 women participated in the study. The prevalence of RTI was 33.3% (95% CI:33.3$\pm$3.4%). Vaginal discharge was the commonest symptom (23.7%). On analysis of factors, RTIs were significantly associated with age of women, duration of marriage, usage of Intrauterine contraceptive devices, personal and menstrual hygiene practices ($p<0.05$).

Conclusion:

Despite the efforts of the Government through various programmes for prevention and treatment of RTIs / STIs, this study shows that it continues to be major problem among women. Its association with risk factors like contraceptive usage, personal and menstrual hygiene factors suggests scope for intervention through health education programmes among women in preventing RTIs.

Key words: Reproductive tract infections, married women, rural**.**